



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



## Final Analytical Report

Site Name.....	Dimock Residential Groundwater
Sample Collection Date(s).....	03/05/12 07:15- 03/08/12 15:09
Contact.....	Rich Fetzer
Report Date.....	03/28/12 08:12
Project #.....	DAS R33937
Work Order.....	1203001

### **Analyses included in this report:**

Anions By IC 300.0	Glycol by HPLC/MS/MS
Nitrite+Nitrate as Nitrogen by EPA 353.2 FIA	SVOCs by CLP Equivalent
Total Dissolved Solids by 2540C	Total Metals by 200.7
Total Metals by 200.8	Total Nitrogen by mod. EPA 353.2 FIA.
Total Suspended Solids by 2540D	VOCs by CLP Equivalent (trace)

Approved for Release

1203001 FINAL DAS R33937 03 28 12 813  
Page 1 of 122

---

OASQA Representative



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

**Project #:** DAS R33937

**Report Narrative**



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

**Project #:** DAS R33937

## **Report Narrative**

The EPA Region 3 Laboratory's Quality System is NELAP accredited. The National Environmental Laboratory Accreditation Program (NELAP) is a voluntary environmental laboratory accreditation association of State and Federal agencies.

### **General Notes:**

#### **Metals Analysis Note:**

Uranium, strontium, lithium, tin and titanium were analyzed as an on-demand analysis.

The quantitation limits for several samples for tin were qualified estimated "UJ" due to a quality control sample outside of acceptance limits.

The quantitation limit for uranium for sample 1203001-12 was qualified estimated "UJ" due to the absence of a second source quality control sample.

#### **Glycols by HPLC/MS/MS Note:**

Samples were analyzed for diethylene glycol (DiG) (CAS# 111-46-6), triethylene glycol (TriG) (112-27-6), tetraethylene glycol (TeG) (112-60-7), 2-butoxyethanol (2-Bu) (111-76-2) and 2-methoxyethanol (2-Me)(109-86-4) by HPLC/MS/MS (inst id: TQD-LCMSMS) on a Waters Atlantis dC18 3um 2.1 x 150mm column (s/n- 0141301481).

An HPLC/MS/MS method does not currently exist for these analytes. ASTM D 7731-11 and EPA SW-846 Methods 8000C and 8321 were followed for method development and QA/QC limits where applicable. All applicable OASQA On Demand QA/QC protocols were followed.

All QC were within criteria. The NQL for DiG was raised to 50ug/L and the NQL for 2-Bu was raised to 25ug/L because of instrument response during initial calibration. On Demand protocols include the analysis of a low level blank spike at the NQL. All low level blank spikes were within the OASQA limits of 60-140% recovery and are as follows: DiG: 66%, TriG: 61%, TeG: 66%, 2-Bu: 75%, 2-Me: 108%.

The aqueous samples were injected without extraction onto the HPLC/MS/MS system.

Refer to notes in the case file for additional information regarding the analysis.

#### **SVOAs Analysis Note:**

All samples were extracted by EPA SW-846 Method 3520C followed by analysis using EPA SW-846 Method 8270D. Refer to notes in case file for additional information regarding the analysis.

Results for sample 1203001-08 are suspect. Although all QC and lab blanks are acceptable for sample 1203001-08, low levels of certain compounds detected indicate possible glassware contamination.

The multiple TICs found in sample 1203001-01 are likely due to extraction of a pH strip that fell in the jar and was not able to be removed.

For this project one additional compound is added to the SVOC analysis; 1-methylnaphthalene.

For all samples, quantitation limits for 2,4-dinitrophenol are qualified "UJ" due to exceeding calibration limits. For most samples, quantitation limits for benzo(k) fluoranthene are qualified "UJ" due to exceeding calibration limits.

For all samples, quantitation limits for 2,4-dinitrophenol are elevated due to zero percent recovery in the low-spike quality control check



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

**Project #:** DAS R33937

## **Report Narrative**

(BS1) and mid-low-spike quality control check (BS3). Results for the mid-level spike quality control check (BS2) are within acceptance limits; therefore, quantitation limits are raised to the mid-level value. For all samples, quantitation limits for 4,6-dinitro-2-methylphenol are qualified "UJ" due to low percent recovery in the low-spike quality control check (BS1). In the report, only 21 compounds are reported for blank spike quality control check samples. Quality control information about the additional spiked compounds is available in the case file.

Results for a limited number of compounds found in all samples have been qualified "B" because of contamination found in either the method blank, field blank, or equipment blank.

### **VOA Analysis Note:**

Acrylonitrile was analyzed on-demand using CLP equivalent methodology. This analyte does not appear in the data tables or the QC summary and all data for this compound is summarized here. Acrylonitrile was not detected in any of the samples above a quantitation limit of 2 ug/L. A four point curve was analyzed (2, 5, 10 and 20 ug/L). The samples were preserved to a pH<2 with HCl. A low level second source blank spike analyzed at a concentration of 2 ug/L had a recovery of 99%. A mid level second source blank spike analyzed at a concentration of 10 ug/L had a recovery of 101%. Matrix spike/matrix spike duplicate analysis was performed for sample 1203001-04. Matrix spike recoveries were 102% and 94%.

2-Chloroethylvinyl ether is not included in the analysis. 2-chloroethylvinyl ether breaks down in acidified samples.

### **TSS Analysis Note:**

All required instrument QC was run and was within the required criteria.

### **TDS Analysis Note:**

All required instrument QC was run and was within the required criteria.

### **Nitrite/Nitrate and Total Nitrogen Analysis Note:**

Samples were run as an on-demand analysis.

All required instrument QC was run and was within the required criteria.

As required for this project, sample results for nitrate/nitrite were qualified "B" when the value was less than 10X the value reported for contaminated blanks. All samples with detectable results were qualified "B" due to the field blank (FB21) contamination.

### **Anions Analysis Note:**

Chloride was detected in field blanks with the FB20 result the highest. Therefore, as required for this project, sample results were qualified "B" when the values for chloride were less than 10X the value reported for the field blanks.

All required instrument QC was run and was within the required criteria.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Matrix	Date Sampled Begin	Date Sampled End	Date Received
FB19	1203001-01	Water	3/05/12 09:36	3/05/12 09:36	3/06/12 11:12
HW60	1203001-02	Drinking Water	3/05/12 12:25	3/05/12 12:25	3/06/12 11:12
TB49	1203001-03	Water	3/05/12 00:00	3/05/12 07:15	3/06/12 11:12
HW56	1203001-04	Drinking Water	3/05/12 16:54	3/05/12 16:54	3/07/12 11:00
TB50	1203001-05	Water	3/05/12 10:00	3/05/12 10:00	3/07/12 11:00
FB20	1203001-06	Water	3/06/12 14:00	3/06/12 14:00	3/08/12 10:45
HW61-P	1203001-07	Drinking Water	3/06/12 16:00	3/06/12 16:00	3/08/12 10:45
HW61z	1203001-08	Drinking Water	3/06/12 15:42	3/06/12 15:42	3/08/12 10:45
HW61	1203001-09	Drinking Water	3/06/12 15:42	3/06/12 15:42	3/08/12 10:45
TB51	1203001-10	Water	3/06/12 07:15	3/06/12 07:15	3/08/12 10:45
FB21	1203001-11	Water	3/08/12 13:38	3/08/12 13:38	3/09/12 12:05
HW50	1203001-12	Drinking Water	3/08/12 15:09	3/08/12 15:09	3/09/12 12:05
TB52	1203001-13	Water	3/08/12 10:35	3/08/12 10:35	3/09/12 12:05



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

Page 1 of 2

USEPA CLP Generic COC (LAB COPY)

Date Shipped: 3/6/2012

Carrier Name: FedEx

Airbill No: 7933 0152 9703

## CHAIN OF CUSTODY RECORD

No: 3-030512-150147-0242

Case #: CT5865

Lab: EPA R3 Laboratory

Lab Contact:

Lab Phone: 410.305.3032

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB19	Aqueous/ Joel Munson	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7) Glycols, Metals, WeiChem(7), SVOC+TIC, TDS(7), TSS(7)	19032 (HCl / 40mL Glass Vial), 19033 (HCl / 40mL Glass Vial), 19034 (HCl / 40mL Glass Vial), 19037 (-NA- / 500mL HDPE), 19038 (-NA- / 40mL Glass Vial), 19039 (HNO3 / 500mL HDPE), 19040 (H2SO4 / 500mL HDPE), 19041 (-NA- / 1000mL Amber), 19042 (-NA- / 500mL HDPE), 19043 (-NA- / 500mL HDPE) (10)	FB19	03/05/2012 09:36	1203001-01
HW60	Drinking Water/ Mike Ferrier	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7), Glycols, Metals, WeiChem(7), SVOC+TIC, TDS(7), TSS(7)	19055 (HCl / 40mL Glass Vial), 19056 (HCl / 40mL Glass Vial), 19057 (HCl / 40mL Glass Vial), 19070 (-NA- / 500mL HDPE), 19071 (-NA- / 40mL Glass Vial), 19072 (HNO3 / 500mL HDPE), 19073 (H2SO4 / 500mL HDPE), 19074 (-NA- / 1000mL Amber), 19075 (-NA- / 500mL HDPE), 19076 (-NA- / 500mL HDPE) (10)	HW60	03/05/2012 12:25	1203001-02

Special Instructions:	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Tenp Blank 4c	

Analysis Key: VOC+TIC=07-Volatiles+Acrylonitrile (TCL+TICs), Anions=07-Anions Method 300.0, Glycols=07-Glycols+2-Butoxyethanol+EGME, Metals=07-Metals, WeiChem=07-Phosphorous\_N03-N02\_Tot-N, SVOC+TIC=07-Semivolatiles (TCL+TICs+EGME+1-Methylnaphthalen, TDS=07-Solids, Total Dissolved, TSS=07-Solids, Total Suspended

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
20	Ed Pflug	3/5/12	KML	3/6/12	11:42						



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

Project #: DAS R33937

Page 2 of 2

USEPA CLP Generic COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-030512-150147-024

DateShipped: 3/5/2013

Carrier Name: FedEx

Carrier Name: FedEx  
Airbill No: Z0232-0152-0702

2011 OTS005

Lab: EPA R3 Laboratory

#### **Lab Contact:**

Lab Phone: 410 305 3032

Special Instructions: Temp Blank 4°C	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

Page 1 of 1

USEPA CLP Generic COC (LAB COPY)

## CHAIN OF CUSTODY RECORD

No: 3-030612-092355-0249

Date Shipped: 3/6/2012

Lab: EPA R3 Laboratory

Carrier Name: FedEx

Lab Contact:

Airbill No: 7933 0442 0860

Case #: CT5865

Lab Phone: 410.305.3032

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW56	Drinking Water/ Mike Ferrier	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7), VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), SVOC+TIC, SVOC+TIC	19099 (HCl / 40mL Glass Vial), 19100 (HCl / 40mL Glass Vial), 19101 (HCl / 40mL Glass Vial), 19104 (-NA- / 500mL HDPE), 19105 (-NA- / 40mL Glass Vial), 19106 (HNO3 / 500mL HDPE), 19107 (H2SO4 / 500mL HDPE), 19108 (-NA- / 1000mL Amber), 19109 (-NA- / 500mL HDPE), 19110 (-NA- / 500mL HDPE), 19124 (HCl / 40mL Glass Vial), 19125 (HCl / 40mL Glass Vial), 19126 (HCl / 40mL Glass Vial), 19127 (HCl / 40mL Glass Vial), 19128 (HCl / 40mL Glass Vial), 19129 (HCl / 40mL Glass Vial), 19142 (-NA- / 1000mL Amber), 19143 (-NA- / 1000mL Amber) (18)	HW56	03/05/2012 16:54	1203001-04
TB50	Aqueous/ Kim Whitlock	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7)	19091 (HCl / 40mL Glass Vial), 19092 (HCl / 40mL Glass Vial), 19093 (HCl / 40mL Glass Vial) (3)	TB50	03/05/2012 10:00	1203001-05

Shipment for Case Complete? N	
Sample(s) to be used for Lab QC: HW56	Temp Blank 5°C
Samples Transferred From Chain of Custody #	

Analysis Key: VOC+TIC=07-Volatiles+Acrylonitrile (TCL+TICs), Anions=07-Anions, Method 300.0, Glycols=07-Glycols+2-Butoxyethanol+EGME, Metals=07-Metals, WetChem=07-Phosphorous\_N03-, N02-, Tot-N, SVOC+TIC=07-Semivolatiles (TCL+TICs+EGME+1-Methylnaphthalen), TDS=07-Solids, Total Dissolved, TSS=07-Solids, Total Suspended

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
21	D. Kuehne	3/6/12	K. Marshall	3/6/12	11:00						

1203001 FINAL DAS R33937

03 28 12 813

Page 8 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

Project #: DAS R33937

Page 2 of 2

USEPA CLP Generic GOC (LAB COPY)

Date Shipped: 3/7/2012

Date completed: 6/1/2011

Carrel Name: TedEx

CHAIN OF CUSTODY RECORD

No. 3 030312 120520 0255

Lab: EPA R3 Laboratories

RJ Laboratory  
Lab Contact:

Lab Contact:

Special Instructions:	<i>50°C temp Blank run 3/8/12</i>	Shipment for Case Complete? N
Samples Transferred From Chain of Custody #		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

Page 1 of 2

USEPA CLP Generic COC (LAB COPY)

## CHAIN OF CUSTODY RECORD

No: 3-030712-120529-0255

Date Shipped: 3/7/2012

Lab: EPA R3 Laboratory

Carrier Name: FedEx

Lab Contact:

Airbill No: 798141115945

Case #: CT5865

Lab Phone: 410.305.3032

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tags/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB20	Aqueous/ Joel Munson	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7)	19222 (HCl / 40mL Glass Vial), 19223 (HCl / 40mL Glass Vial), 19224 (HCl / 40mL Glass Vial) (3)	FB20	03/06/2012 14:00	1203001-06
HW61	Drinking Water/ Mike Ferrier	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7)	19152 (HCl / 40mL Glass Vial), 19153 (HCl / 40mL Glass Vial), 19154 (HCl / 40mL Glass Vial), 19157 (-NA- / 500mL HDPE), 19158 (-NA- / 40mL Glass Vial), 19159 (HNO3 / 500mL HDPE), 19160 (H2SO4 / 500mL HDPE), 19161 (-NA- / 1000mL Amber), 19162 (-NA- / 500mL HDPE), 19163 (-NA- / 500mL HDPE) (10)	HW61	03/06/2012 15:42	1203001-09
HW61-P	Drinking Water/ Brian Burris	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7)	19204 (HCl / 40mL Glass Vial), 19205 (HCl / 40mL Glass Vial), 19206 (HCl / 40mL Glass Vial) (3)	HW61-P	03/06/2012 16:00	1203001-07

Special Instructions:	Shipment for Case Complete? N	
	Samples Transferred From Chain of Custody #	
Analysis Key: VOC+TIC=07-Volatiles+Acrylonitrile (TCL+TICs), Anions=07-Anions, Method 300.0, Glycols=07-Glycols+2-Butoxyethanol+EGME, Metals=07-Metals, WetChem=07-Phosphorous_Na3-NO2_Tot-N, SVOC+TIC=07-Semivolatile (TCL+TICs+EGME+1-Methylnaphthalen), TDS=07-Solids, Total Dissolved, TSS=07-Solids, Total Suspended		

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
16	Dalby	3/7/12	Kim	3/8/12	10:45						

1203001 FINAL

DAS R33937

03 28 12 813

Page 10 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

Page 1 of 1

## USEPA CLP Generic COC (LAB COPY)

Date Shipped: 3/7/2012

Carrier Name: FedEx

Airbill No: 7933 1071 5805

## CHAIN OF CUSTODY RECORD

Case #: CT5865

No: 3-030712-122217-0256

Lab: EPA R3 Laboratory

Lab Contact:

Lab Phone: 410.305.3032

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB20	Aqueous/ Joel Munson	Grab	Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7)	19227 (-NA- / 500mLHDPE), 19228 (-NA- / 40mLGlassVial), 19229 (HNO3 / 500mLHDPE), 19230 (H2SO4 / 500mLHDPE), 19231 (-NA- / 1000mLAmber), 19232 (-NA- / 500mLHDPE), 19233 (-NA- / 500mLHDPE) (7)	FB20	03/06/2012 14:00	1203001-06
HW61-P	Drinking Water/ Brian Burris	Grab	Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7)	19209 (-NA- / 500mLHDPE), 19210 (-NA- / 40mLGlassVial), 19211 (HNO3 / 500mLHDPE), 19212 (H2SO4 / 500mLHDPE), 19213 (-NA- / 1000mLAmber), 19214 (-NA- / 500mLHDPE), 19215 (-NA- / 500mLHDPE) (7)	HW61-P	03/06/2012 16:00	1203001-07

Special Instructions: <i>No temp blank (sample cooler was packed with ice) on 3/8/12</i>	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key: Anions=07-Anions, Method 300.0, Glycols=07-Glycols+2-Butoxyethanol+EGME, Metals=07-Metals, WetChem=07-Phosphorous_NO3-NO2-Tot-N, SVOC+TIC=07-Semivolatiles (TCL-TICs+EGME+1-Methylnaphthalen, TDS=07-Solids, Total Dissolved, TSS=07-Solids, Total Suspended	

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
14	<i>B. M.</i>	3/7/12	<i>K. M.</i>	3/8/12	10:45						

1203001 FINAL DAS R33937

03 28 12 813

Page 11 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

Page 1 of 2

USEPA CLP Generic COC (LAB COPY)

## CHAIN OF CUSTODY RECORD

No: 3-030812-164825-0261

Date Shipped: 3/8/2012

Lab: EPA R3 Laboratory

CarrierName: FedEx

Case #: CT5865

Lab Contact:

AirbillNo: 7933 1786 4140

Lab Phone: 410.305.3032

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
FB21	Aqueous/ Joel Munson	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7)	18937 (HCl / 40mL Glass Vial), 18938 (HCl / 40mL Glass Vial), 18939 (HCl / 40mL Glass Vial), 18942 (-NA- / 500mL HDPE), 18943 (-NA- / 40mL Glass Vial), 18944 (HNO3 / 500mL HDPE), 18946 (H2SO4 / 500mL HDPE), 18947 (-NA- / 1000mL Amber), 18948 (-NA- / 500mL HDPE), 18949 (-NA- / 500mL HDPE) (10)	FB21	03/08/2012 13:38	1203001 -11
HW50	Drinking Water/ Mike Ferrier	Grab	VOC+TIC(7), VOC+TIC(7), VOC+TIC(7), Anions(7), Glycols, Metals, WetChem(7), SVOC+TIC, TDS(7), TSS(7)	18977 (HCl / 40mL Glass Vial), 18978 (HCl / 40mL Glass Vial), 18979 (HCl / 40mL Glass Vial), 18982 (-NA- / 500mL HDPE), 18983 (-NA- / 40mL Glass Vial), 18984 (HNO3 / 500mL HDPE), 18986 (H2SO4 / 500mL HDPE), 18987 (-NA- / 1000mL Amber), 18988 (-NA- / 500mL HDPE), 18989 (-NA- / 500mL HDPE) (10)	HW50	03/08/2012 15:09	1203001 -12

Special Instructions:	Temp. BIK = 3.5°C	Shipment for Case Complete? N
		Samples Transferred From Chain of Custody # 3/9/12
Analysis Key: VOC+TIC=07-Volatiles+Acrylonitrile (TCL+TICs), Anions=07-Anions_Method 300.0, Glycols=07-Glycols+2-Butoxyethanol+EGME, Metals=07-Metals, WetChem=07-Phosphorous_NO3-, NO2-, Tot-N, SVOC+TIC=07-Semivolatiles (TCL+TICs+EGME+1-Methylnaphthalen), TDS=07-Solids, Total Dissolved, TSS=07-Solids, Total Suspended		

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
20	DJ Acosta	3/8/12	Yonge Akbar	3/9/12	12:05						



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

Project #: DAS R33937

Page 2 of 2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 3/8/2012

Carrier Name: FedEx

**CHAIN OF CUSTODY RECORD**

No: 3-030812-164825-0261

Lab EPA B3 Laboratory

**Lab Contact:**

Lab Phone: 410 305 3033

Special Instructions:	Temp. $\Delta K = 3.5^{\circ}\text{C}$ Date 3/9/14	Shipment for Case Complete? N
Samples Transferred From Chain of Custody #		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	U		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	<b>0.165</b>	B	0.050	1	03/15/12	03/16/12 15:21	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:38	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
<b>Chloride</b>	<b>0.735</b>	B	0.250	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO <sub>4</sub>	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 19:20	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 19:20	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:24	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 14 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 19:20	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 19:20	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Acenaphthylene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Acetophenone	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Anthracene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Atrazine	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzaldehyde	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzo(a)anthracene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzo(a)pyrene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzo(b)fluoranthene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzo(ghi)perylene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Benzo(k)fluoranthene	U	UJ	5.00	1	03/08/12	03/10/12 01:26	R3QA201
1,1-Biphenyl	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Bis(2-chloroethoxy)methane	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Bis(2-chloroethyl)ether	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Bis(2-chloroisopropyl)ether	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>3.89</b>	B, J	5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Bromophenyl phenyl ether	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Butyl benzyl phthalate	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Carbazole	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Caprolactam	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Chloroaniline	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Chloro-3-methylphenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Chloronaphthalene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Chlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Chlorophenyl phenyl ether	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Chrysene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Dibenz(a,h)anthracene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Dibenzofuran	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
3,3'-Dichlorobenzidine	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
<b>Diethyl phthalate</b>	<b>0.044</b>	B, J	5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,4-Dichlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 15 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Dimethyl phthalate	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,4-Dinitrophenol	U	UJ	40.0	1	03/08/12	03/10/12 01:26	R3QA201
<b>Di-n-butyl phthalate</b>	<b>1.93</b>	B, J	5.00	1	03/08/12	03/10/12 01:26	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	10.0	1	03/08/12	03/10/12 01:26	R3QA201
2,4-Dinitrotoluene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,6-Dinitrotoluene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Di-n-octyl phthalate	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Fluoranthene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Fluorene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Hexachlorobenzene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Hexachlorobutadiene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Hexachlorocyclopentadiene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Hexachloroethane	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Indeno(1,2,3-cd)pyrene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Isophorone	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
1-Methylnaphthalene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Methylnaphthalene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Methylphenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Methylphenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Naphthalene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Nitroaniline	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
3-Nitroaniline	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Nitroaniline	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Nitrobenzene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2-Nitrophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
4-Nitrophenol	U		10.0	1	03/08/12	03/10/12 01:26	R3QA201
N-Nitrosodimethylamine	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
N-Nitroso-di-n-propylamine	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
N-Nitrosodiphenylamine	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Pentachlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Phenanthrene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Phenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
Pyrene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
1,2,4,5-Tetrachlorobenzene	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,3,4,6-Tetrachlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,4,5-Trichlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201
2,4,6-Trichlorophenol	U		5.00	1	03/08/12	03/10/12 01:26	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 16 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	23.9		48 %	21-110	03/08/12	03/10/12 01:26	R3QA201
Surrogate: Phenol-d5	27.4		55 %	10-110	03/08/12	03/10/12 01:26	R3QA201
Surrogate: Nitrobenzene-d5	12.2		49 %	35-114	03/08/12	03/10/12 01:26	R3QA201
Surrogate: 2-Fluorobiphenyl	13.6		55 %	43-116	03/08/12	03/10/12 01:26	R3QA201
Surrogate: 2,4,6-Tribromophenol	28.1		56 %	10-123	03/08/12	03/10/12 01:26	R3QA201
Surrogate: Terphenyl-d14	16.0		64 %	33-141	03/08/12	03/10/12 01:26	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
<b>Acetone</b>	<b>2.8</b>		2.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
<b>Bromodichloromethane</b>	<b>1.7</b>		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
<b>Chlorodibromomethane</b>	<b>0.2</b>	J	0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
<b>Chloroform</b>	<b>9.6</b>		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 17 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags	Quantitation Qualifiers	Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2-Dichloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1-Dichloroethene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
cis-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
trans-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,3-Dichloropropane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
2,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1-Dichloropropene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
cis-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
trans-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Ethylbenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Freon 113	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Hexachlorobutadiene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
2-Hexanone	U			2.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Isopropylbenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
p-Isopropyltoluene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Methyl Acetate	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Methylcyclohexane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Methyl-tert-butyl ether	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Methylene Chloride	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
4-Methyl-2-pentanone	U			2.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Naphthalene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
n-Propylbenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Styrene	U			1.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Tetrachloroethene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
<b>Toluene</b>	<b>0.3</b>	J		0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1,1-Trichloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,1,2-Trichloroethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Trichloroethene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Trichlorofluoromethane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2,3-Trichloropropane	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Vinyl acetate	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Vinyl chloride	U			0.5	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 18 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210
<b>o-Xylene</b>	<b>0.1</b>	J	1.0	1	03/12/12	03/12/12 16:52	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.860		<b>96 %</b>	86-115	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	3.880		<b>97 %</b>	76-114	03/12/12	03/12/12 16:52	CLP trace/R3QA210
Surrogate: Toluene-d8	4.050		<b>101 %</b>	88-110	03/12/12	03/12/12 16:52	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	174		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	U		0.050	1	03/15/12	03/16/12 15:22	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:39	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	34.9		1.00	4	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	1.56		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 19:41	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 19:41	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:30	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 20 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 19:41	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 19:41	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Acenaphthylene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Acetophenone	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Anthracene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Atrazine	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzaldehyde	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzo(a)anthracene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzo(a)pyrene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzo(b)fluoranthene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzo(ghi)perylene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Benzo(k)fluoranthene	U	UJ	4.76	1	03/08/12	03/09/12 18:48	R3QA201
1,1-Biphenyl	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Bis(2-chloroethoxy)methane	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Bis(2-chloroethyl)ether	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Bis(2-chloroisopropyl)ether	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.450</b>	B, J	4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Bromophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.070</b>	B, J	4.76	1	03/08/12	03/09/12 18:48	R3QA201
Carbazole	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Caprolactam	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Chloroaniline	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Chloro-3-methylphenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Chloronaphthalene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Chlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Chlorophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Chrysene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Dibenz(a,h)anthracene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Dibenzofuran	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
3,3'-Dichlorobenzidine	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
<b>Diethyl phthalate</b>	<b>0.044</b>	B, J	4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,4-Dichlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 21 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Dimethyl phthalate	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,4-Dinitrophenol	U	UJ	38.1	1	03/08/12	03/09/12 18:48	R3QA201
<b>Di-n-butyl phthalate</b>	<b>1.43</b>	B, J	4.76	1	03/08/12	03/09/12 18:48	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	9.52	1	03/08/12	03/09/12 18:48	R3QA201
2,4-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,6-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Di-n-octyl phthalate	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Fluoranthene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Fluorene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Hexachlorobenzene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Hexachlorobutadiene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Hexachlorocyclopentadiene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Hexachloroethane	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Indeno(1,2,3-cd)pyrene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Isophorone	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
1-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Methylphenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Methylphenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Naphthalene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Nitroaniline	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
3-Nitroaniline	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Nitroaniline	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Nitrobenzene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2-Nitrophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
4-Nitrophenol	U		9.52	1	03/08/12	03/09/12 18:48	R3QA201
N-Nitrosodimethylamine	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
N-Nitroso-di-n-propylamine	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
N-Nitrosodiphenylamine	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Pentachlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Phenanthrene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Phenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
Pyrene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
1,2,4,5-Tetrachlorobenzene	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,3,4,6-Tetrachlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,4,5-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201
2,4,6-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 18:48	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 22 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	33.9		71 %	21-110	03/08/12	03/09/12 18:48	R3QA201
Surrogate: Phenol-d5	39.5		83 %	10-110	03/08/12	03/09/12 18:48	R3QA201
Surrogate: Nitrobenzene-d5	19.9		84 %	35-114	03/08/12	03/09/12 18:48	R3QA201
Surrogate: 2-Fluorobiphenyl	19.2		81 %	43-116	03/08/12	03/09/12 18:48	R3QA201
Surrogate: 2,4,6-Tribromophenol	47.5		100 %	10-123	03/08/12	03/09/12 18:48	R3QA201
Surrogate: Terphenyl-d14	22.3		93 %	33-141	03/08/12	03/09/12 18:48	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	U		2.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
<b>Carbon disulfide</b>	<b>0.09</b>	J	0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 23 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210

1203001 FINAL DAS R33937

03 28 12 813

Page 24 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 17:19	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.800		95 %	86-115	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	3.850		96 %	76-114	03/12/12	03/12/12 17:19	CLP trace/R3QA210
Surrogate: Toluene-d8	3.980		100 %	88-110	03/12/12	03/12/12 17:19	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB49**Lab ID:** 1203001-03**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	<b>0.4</b>	J	2.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 26 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB49**Lab ID:** 1203001-03**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Freon 113	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 17:46	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.870		97 %	86-115	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.110		103 %	76-114	03/12/12	03/12/12 17:46	CLP trace/R3QA210
Surrogate: Toluene-d8	4.010		100 %	88-110	03/12/12	03/12/12 17:46	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	95		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	U	B	0.050	1	03/15/12	03/16/12 15:25	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:42	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	0.974	B	0.250	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	10.1		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 20:01	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 20:01	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:36	SW846 8321/ASTM D773-11 Modified



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:01	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:01	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Acenaphthylene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Acetophenone	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Anthracene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Atrazine	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzaldehyde	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzo(a)anthracene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzo(a)pyrene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzo(b)fluoranthene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzo(ghi)perylene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Benzo(k)fluoranthene	U	UJ	4.76	1	03/08/12	03/09/12 19:38	R3QA201
1,1-Biphenyl	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Bis(2-chloroethoxy)methane	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Bis(2-chloroethyl)ether	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Bis(2-chloroisopropyl)ether	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.428</b>	B, J	4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Bromophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.060</b>	B, J	4.76	1	03/08/12	03/09/12 19:38	R3QA201
Carbazole	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Caprolactam	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Chloroaniline	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Chloro-3-methylphenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Chloronaphthalene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Chlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Chlorophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Chrysene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Dibenz(a,h)anthracene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Dibenzofuran	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
3,3'-Dichlorobenzidine	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
<b>Diethyl phthalate</b>	<b>0.035</b>	B, J	4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,4-Dichlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 29 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Dimethyl phthalate	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,4-Dinitrophenol	U	UJ	38.1	1	03/08/12	03/09/12 19:38	R3QA201
<b>Di-n-butyl phthalate</b>	<b>1.60</b>	B, J	4.76	1	03/08/12	03/09/12 19:38	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	9.52	1	03/08/12	03/09/12 19:38	R3QA201
2,4-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,6-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Di-n-octyl phthalate	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Fluoranthene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Fluorene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Hexachlorobenzene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Hexachlorobutadiene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Hexachlorocyclopentadiene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Hexachloroethane	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Indeno(1,2,3-cd)pyrene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Isophorone	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
1-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Methylphenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Methylphenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Naphthalene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Nitroaniline	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
3-Nitroaniline	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Nitroaniline	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Nitrobenzene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2-Nitrophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
4-Nitrophenol	U		9.52	1	03/08/12	03/09/12 19:38	R3QA201
N-Nitrosodimethylamine	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
N-Nitroso-di-n-propylamine	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
N-Nitrosodiphenylamine	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Pentachlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Phenanthrene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Phenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
Pyrene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
1,2,4,5-Tetrachlorobenzene	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,3,4,6-Tetrachlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,4,5-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201
2,4,6-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 19:38	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 30 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	36.4		76 %	21-110	03/08/12	03/09/12 19:38	R3QA201
Surrogate: Phenol-d5	41.5		87 %	10-110	03/08/12	03/09/12 19:38	R3QA201
Surrogate: Nitrobenzene-d5	21.0		88 %	35-114	03/08/12	03/09/12 19:38	R3QA201
Surrogate: 2-Fluorobiphenyl	20.1		85 %	43-116	03/08/12	03/09/12 19:38	R3QA201
Surrogate: 2,4,6-Tribromophenol	46.9		99 %	10-123	03/08/12	03/09/12 19:38	R3QA201
Surrogate: Terphenyl-d14	21.8		91 %	33-141	03/08/12	03/09/12 19:38	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	U		2.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 31 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210

1203001 FINAL DAS R33937

03 28 12 813

Page 32 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 18:13	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.900		98 %	86-115	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.180		104 %	76-114	03/12/12	03/12/12 18:13	CLP trace/R3QA210
Surrogate: Toluene-d8	4.020		100 %	88-110	03/12/12	03/12/12 18:13	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB50**Lab ID:** 1203001-05**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	0.3	J	2.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 34 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB50**Lab ID:** 1203001-05**Sample Matrix:** Water**Date Collected:** 03/05/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Freon 113	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 18:40	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.850		96 %	86-115	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.220		106 %	76-114	03/12/12	03/12/12 18:40	CLP trace/R3QA210
Surrogate: Toluene-d8	3.960		99 %	88-110	03/12/12	03/12/12 18:40	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	U		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	<b>0.168</b>	B	0.050	1	03/15/12	03/16/12 15:27	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:45	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
<b>Chloride</b>	<b>1.00</b>		0.250	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO <sub>4</sub>	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 20:22	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 20:22	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:41	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 36 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:22	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:22	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Acenaphthylene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Acetophenone	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Anthracene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Atrazine	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzaldehyde	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzo(a)anthracene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzo(a)pyrene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzo(b)fluoranthene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzo(ghi)perylene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Benzo(k)fluoranthene	U	UJ	4.76	1	03/08/12	03/09/12 22:07	R3QA201
1,1-Biphenyl	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Bis(2-chloroethoxy)methane	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Bis(2-chloroethyl)ether	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Bis(2-chloroisopropyl)ether	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.474</b>	B, J	4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Bromophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.075</b>	B, J	4.76	1	03/08/12	03/09/12 22:07	R3QA201
Carbazole	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
<b>Caprolactam</b>	<b>0.284</b>	J	4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Chloroaniline	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Chloro-3-methylphenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Chloronaphthalene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Chlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Chlorophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Chrysene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Dibenz(a,h)anthracene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Dibenzofuran	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
3,3'-Dichlorobenzidine	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
<b>Diethyl phthalate</b>	<b>0.050</b>	B, J	4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,4-Dichlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 37 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Dimethyl phthalate	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,4-Dinitrophenol	U	UJ	38.1	1	03/08/12	03/09/12 22:07	R3QA201
<b>Di-n-butyl phthalate</b>	<b>1.17</b>	B, J	4.76	1	03/08/12	03/09/12 22:07	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	9.52	1	03/08/12	03/09/12 22:07	R3QA201
2,4-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,6-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Di-n-octyl phthalate	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Fluoranthene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Fluorene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Hexachlorobenzene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Hexachlorobutadiene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Hexachlorocyclopentadiene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Hexachloroethane	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Indeno(1,2,3-cd)pyrene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Isophorone	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
1-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Methylphenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Methylphenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Naphthalene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
3-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Nitrobenzene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2-Nitrophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
4-Nitrophenol	U		9.52	1	03/08/12	03/09/12 22:07	R3QA201
N-Nitrosodimethylamine	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
N-Nitroso-di-n-propylamine	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
N-Nitrosodiphenylamine	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Pentachlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Phenanthrene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Phenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
Pyrene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
1,2,4,5-Tetrachlorobenzene	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,3,4,6-Tetrachlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,4,5-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201
2,4,6-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 22:07	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 38 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	35.1		74 %	21-110	03/08/12	03/09/12 22:07	R3QA201
Surrogate: Phenol-d5	40.5		85 %	10-110	03/08/12	03/09/12 22:07	R3QA201
Surrogate: Nitrobenzene-d5	20.5		86 %	35-114	03/08/12	03/09/12 22:07	R3QA201
Surrogate: 2-Fluorobiphenyl	19.8		83 %	43-116	03/08/12	03/09/12 22:07	R3QA201
Surrogate: 2,4,6-Tribromophenol	47.2		99 %	10-123	03/08/12	03/09/12 22:07	R3QA201
Surrogate: Terphenyl-d14	21.4		90 %	33-141	03/08/12	03/09/12 22:07	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
<b>Acetone</b>	<b>2.1</b>		2.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
<b>Bromodichloromethane</b>	<b>1.6</b>		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
<b>Chlorodibromomethane</b>	<b>0.2</b>	J	0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
<b>Chloroform</b>	<b>9.0</b>		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 39 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags	Quantitation Qualifiers	Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2-Dichloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1-Dichloroethene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
cis-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
trans-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,3-Dichloropropane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
2,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1-Dichloropropene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
cis-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
trans-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Ethylbenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Freon 113	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Hexachlorobutadiene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
2-Hexanone	U			2.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Isopropylbenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
p-Isopropyltoluene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Methyl Acetate	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Methylcyclohexane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Methyl-tert-butyl ether	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Methylene Chloride	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
4-Methyl-2-pentanone	U			2.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Naphthalene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
n-Propylbenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Styrene	U			1.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Tetrachloroethene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
<b>Toluene</b>	<b>0.3</b>	J		0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1,1-Trichloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,1,2-Trichloroethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Trichloroethene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Trichlorofluoromethane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2,3-Trichloropropane	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Vinyl acetate	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Vinyl chloride	U			0.5	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 40 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210
<b>o-Xylene</b>	<b>0.1</b>	J	1.0	1	03/12/12	03/12/12 19:07	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.930		<b>98 %</b>	86-115	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.130		<b>103 %</b>	76-114	03/12/12	03/12/12 19:07	CLP trace/R3QA210
Surrogate: Toluene-d8	4.030		<b>101 %</b>	88-110	03/12/12	03/12/12 19:07	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	187		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	1.64	B	0.050	1	03/15/12	03/16/12 15:28	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	1.36		1.00	1	03/19/12	03/20/12 14:46	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	55.8		2.50	10	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	12.8		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 20:42	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 20:42	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:47	SW846 8321/ASTM D773-11 Modified

1203001 FINAL DAS R33937

03 28 12 813

Page 42 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:42	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 20:42	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Acenaphthylene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Acetophenone	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Anthracene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Atrazine	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzaldehyde	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzo(a)anthracene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzo(a)pyrene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzo(b)fluoranthene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzo(ghi)perylene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Benzo(k)fluoranthene	U	UJ	4.76	1	03/08/12	03/09/12 22:57	R3QA201
1,1-Biphenyl	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Bis(2-chloroethoxy)methane	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Bis(2-chloroethyl)ether	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Bis(2-chloroisopropyl)ether	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.460</b>	B, J	4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Bromophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.061</b>	B, J	4.76	1	03/08/12	03/09/12 22:57	R3QA201
Carbazole	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Caprolactam	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Chloroaniline	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Chloro-3-methylphenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Chloronaphthalene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Chlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Chlorophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Chrysene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Dibenz(a,h)anthracene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Dibenzofuran	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
3,3'-Dichlorobenzidine	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
<b>Diethyl phthalate</b>	<b>0.030</b>	B, J	4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,4-Dichlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 43 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Dimethyl phthalate	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,4-Dinitrophenol	U	UJ	38.1	1	03/08/12	03/09/12 22:57	R3QA201
<b>Di-n-butyl phthalate</b>	<b>1.20</b>	B, J	4.76	1	03/08/12	03/09/12 22:57	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	9.52	1	03/08/12	03/09/12 22:57	R3QA201
2,4-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,6-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Di-n-octyl phthalate	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Fluoranthene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Fluorene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Hexachlorobenzene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Hexachlorobutadiene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Hexachlorocyclopentadiene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Hexachloroethane	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Indeno(1,2,3-cd)pyrene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Isophorone	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
1-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Methylphenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Methylphenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Naphthalene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
3-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Nitroaniline	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Nitrobenzene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2-Nitrophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
4-Nitrophenol	U		9.52	1	03/08/12	03/09/12 22:57	R3QA201
N-Nitrosodimethylamine	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
N-Nitroso-di-n-propylamine	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
N-Nitrosodiphenylamine	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Pentachlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Phenanthrene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Phenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
Pyrene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
1,2,4,5-Tetrachlorobenzene	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,3,4,6-Tetrachlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,4,5-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201
2,4,6-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 22:57	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 44 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	32.0		67 %	21-110	03/08/12	03/09/12 22:57	R3QA201
Surrogate: Phenol-d5	36.0		76 %	10-110	03/08/12	03/09/12 22:57	R3QA201
Surrogate: Nitrobenzene-d5	18.6		78 %	35-114	03/08/12	03/09/12 22:57	R3QA201
Surrogate: 2-Fluorobiphenyl	18.5		78 %	43-116	03/08/12	03/09/12 22:57	R3QA201
Surrogate: 2,4,6-Tribromophenol	44.3		93 %	10-123	03/08/12	03/09/12 22:57	R3QA201
Surrogate: Terphenyl-d14	20.7		87 %	33-141	03/08/12	03/09/12 22:57	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
<b>Acetone</b>	<b>0.4</b>	B, J	2.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 45 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 46 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 19:35	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.980		100 %	86-115	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.210		105 %	76-114	03/12/12	03/12/12 19:35	CLP trace/R3QA210
Surrogate: Toluene-d8	3.960		99 %	88-110	03/12/12	03/12/12 19:35	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	211		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	1.60	B	0.050	1	03/15/12	03/16/12 15:30	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	1.25		1.00	1	03/19/12	03/20/12 14:48	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	59.4		2.50	10	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	12.3		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 21:03	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 21:03	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:52	SW846 8321/ASTM D773-11 Modified

1203001 FINAL DAS R33937

03 28 12 813

Page 48 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:03	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:03	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Acenaphthylene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Acetophenone	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Anthracene</b>	<b>0.065</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Atrazine</b>	<b>0.062</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzaldehyde	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzo(a)anthracene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzo(a)pyrene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzo(b)fluoranthene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzo(ghi)perylene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Benzo(k)fluoranthene	U	UJ	4.76	1	03/08/12	03/09/12 23:47	R3QA201
1,1-Biphenyl	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Bis(2-chloroethoxy)methane	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Bis(2-chloroethyl)ether	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Bis(2-chloroisopropyl)ether	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.470</b>	B, J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>4-Bromophenyl phenyl ether</b>	<b>0.049</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.116</b>	B, J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Carbazole</b>	<b>0.071</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
Caprolactam	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Chloroaniline	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Chloro-3-methylphenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Chloronaphthalene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Chlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Chlorophenyl phenyl ether	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Chrysene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Dibenz(a,h)anthracene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Dibenzofuran</b>	<b>0.022</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
3,3'-Dichlorobenzidine	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Diethyl phthalate</b>	<b>0.073</b>	B, J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,4-Dichlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 49 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Dimethyl phthalate</b>	<b>0.038</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,4-Dinitrophenol	U	UJ	38.1	1	03/08/12	03/09/12 23:47	R3QA201
<b>Di-n-butyl phthalate</b>	<b>0.829</b>	B, J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	9.52	1	03/08/12	03/09/12 23:47	R3QA201
2,4-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,6-Dinitrotoluene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Di-n-octyl phthalate	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Fluoranthene</b>	<b>0.075</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Fluorene</b>	<b>0.035</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Hexachlorobenzene</b>	<b>0.049</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
Hexachlorobutadiene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Hexachlorocyclopentadiene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Hexachloroethane	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Indeno(1,2,3-cd)pyrene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Isophorone	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
1-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Methylnaphthalene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Methylphenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Methylphenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Naphthalene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Nitroaniline	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
3-Nitroaniline	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Nitroaniline	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
Nitrobenzene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2-Nitrophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
4-Nitrophenol	U		9.52	1	03/08/12	03/09/12 23:47	R3QA201
N-Nitrosodimethylamine	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
N-Nitroso-di-n-propylamine	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>N-Nitrosodiphenylamine</b>	<b>0.055</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
Pentachlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Phenanthrene</b>	<b>0.070</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
Phenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
<b>Pyrene</b>	<b>0.073</b>	J	4.76	1	03/08/12	03/09/12 23:47	R3QA201
1,2,4,5-Tetrachlorobenzene	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,3,4,6-Tetrachlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,4,5-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201
2,4,6-Trichlorophenol	U		4.76	1	03/08/12	03/09/12 23:47	R3QA201

1203001 FINAL

DAS R33937

03 28 12 813

Page 50 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	34.1		72 %	21-110	03/08/12	03/09/12 23:47	R3QA201
Surrogate: Phenol-d5	39.3		83 %	10-110	03/08/12	03/09/12 23:47	R3QA201
Surrogate: Nitrobenzene-d5	19.5		82 %	35-114	03/08/12	03/09/12 23:47	R3QA201
Surrogate: 2-Fluorobiphenyl	19.0		80 %	43-116	03/08/12	03/09/12 23:47	R3QA201
Surrogate: 2,4,6-Tribromophenol	46.1		97 %	10-123	03/08/12	03/09/12 23:47	R3QA201
Surrogate: Terphenyl-d14	21.7		91 %	33-141	03/08/12	03/09/12 23:47	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
<b>Acetone</b>	<b>0.3</b>	B, J	2.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 51 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 52 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 20:03	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.960		99 %	86-115	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.300		108 %	76-114	03/12/12	03/12/12 20:03	CLP trace/R3QA210
Surrogate: Toluene-d8	4.090		102 %	88-110	03/12/12	03/12/12 20:03	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	201		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	1.60	B	0.050	1	03/15/12	03/16/12 15:31	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	1.19		1.00	1	03/19/12	03/20/12 14:49	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	56.7		2.50	10	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	12.8		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 21:24	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 21:24	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 12:58	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 54 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:24	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:24	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Acenaphthylene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Acetophenone	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Anthracene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Atrazine	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzaldehyde	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzo(a)anthracene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzo(a)pyrene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzo(b)fluoranthene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzo(ghi)perylene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Benzo(k)fluoranthene	U	UJ	5.00	1	03/08/12	03/10/12 00:37	R3QA201
1,1-Biphenyl	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Bis(2-chloroethoxy)methane	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Bis(2-chloroethyl)ether	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Bis(2-chloroisopropyl)ether	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.504</b>	B, J	5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Bromophenyl phenyl ether	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.044</b>	B, J	5.00	1	03/08/12	03/10/12 00:37	R3QA201
Carbazole	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Caprolactam	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Chloroaniline	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Chloro-3-methylphenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Chloronaphthalene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Chlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Chlorophenyl phenyl ether	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Chrysene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Dibenz(a,h)anthracene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Dibenzofuran	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
3,3'-Dichlorobenzidine	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
<b>Diethyl phthalate</b>	<b>0.031</b>	B, J	5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,4-Dichlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 55 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Dimethyl phthalate	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,4-Dinitrophenol	U	UJ	40.0	1	03/08/12	03/10/12 00:37	R3QA201
<b>Di-n-butyl phthalate</b>	<b>0.998</b>	B, J	5.00	1	03/08/12	03/10/12 00:37	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	10.0	1	03/08/12	03/10/12 00:37	R3QA201
2,4-Dinitrotoluene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,6-Dinitrotoluene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Di-n-octyl phthalate	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Fluoranthene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Fluorene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Hexachlorobenzene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Hexachlorobutadiene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Hexachlorocyclopentadiene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Hexachloroethane	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Indeno(1,2,3-cd)pyrene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Isophorone	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
1-Methylnaphthalene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Methylnaphthalene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Methylphenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Methylphenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Naphthalene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Nitroaniline	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
3-Nitroaniline	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Nitroaniline	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Nitrobenzene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2-Nitrophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
4-Nitrophenol	U		10.0	1	03/08/12	03/10/12 00:37	R3QA201
N-Nitrosodimethylamine	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
N-Nitroso-di-n-propylamine	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
N-Nitrosodiphenylamine	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Pentachlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Phenanthrene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Phenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
Pyrene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
1,2,4,5-Tetrachlorobenzene	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,3,4,6-Tetrachlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,4,5-Trichlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201
2,4,6-Trichlorophenol	U		5.00	1	03/08/12	03/10/12 00:37	R3QA201



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	35.1		70 %	21-110	03/08/12	03/10/12 00:37	R3QA201
Surrogate: Phenol-d5	40.7		81 %	10-110	03/08/12	03/10/12 00:37	R3QA201
Surrogate: Nitrobenzene-d5	20.1		81 %	35-114	03/08/12	03/10/12 00:37	R3QA201
Surrogate: 2-Fluorobiphenyl	19.6		78 %	43-116	03/08/12	03/10/12 00:37	R3QA201
Surrogate: 2,4,6-Tribromophenol	47.2		94 %	10-123	03/08/12	03/10/12 00:37	R3QA201
Surrogate: Terphenyl-d14	20.9		84 %	33-141	03/08/12	03/10/12 00:37	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	U		2.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 57 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210

1203001 FINAL DAS R33937

03 28 12 813

Page 58 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 20:32	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	4.020		100 %	86-115	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.220		106 %	76-114	03/12/12	03/12/12 20:32	CLP trace/R3QA210
Surrogate: Toluene-d8	4.010		100 %	88-110	03/12/12	03/12/12 20:32	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB51**Lab ID:** 1203001-10**Sample Matrix:** Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	0.7	J	2.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 60 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB51**Lab ID:** 1203001-10**Sample Matrix:** Water**Date Collected:** 03/06/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags	Quantitation Qualifiers	Limit	Dilution	Prepared	Analyzed	Method/SOP#
Freon 113	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Hexachlorobutadiene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
2-Hexanone	U			2.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Isopropylbenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
p-Isopropyltoluene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Methyl Acetate	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Methylcyclohexane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Methyl-tert-butyl ether	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Methylene Chloride	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
4-Methyl-2-pentanone	U			2.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Naphthalene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
n-Propylbenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Styrene	U			1.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Tetrachloroethene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
<b>Toluene</b>	<b>0.08</b>	J		0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1,1-Trichloroethane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,1,2-Trichloroethane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Trichloroethene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Trichlorofluoromethane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2,3-Trichloropropane	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Vinyl acetate	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Vinyl chloride	U			0.5	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
m-Xylene/p-Xylene	U			1.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210
o-Xylene	U			1.0	1	03/12/12	03/12/12 21:01	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags	Quantitation Qualifiers	%Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.800			95 %	86-115	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.290			107 %	76-114	03/12/12	03/12/12 21:01	CLP trace/R3QA210
Surrogate: Toluene-d8	4.050			101 %	88-110	03/12/12	03/12/12 21:01	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 61 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	U		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	0.173		0.050	1	03/15/12	03/16/12 15:32	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:50	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	0.792	B	0.250	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 21:44	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 21:44	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 13:03	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 62 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:44	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 21:44	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Acenaphthylene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Acetophenone	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Anthracene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Atrazine	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzaldehyde	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzo(a)anthracene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzo(a)pyrene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzo(b)fluoranthene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzo(ghi)perylene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Benzo(k)fluoranthene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
1,1-Biphenyl	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Bis(2-chloroethoxy)methane	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Bis(2-chloroethyl)ether	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Bis(2-chloroisopropyl)ether	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.173</b>	B, J	5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Bromophenyl phenyl ether	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Butyl benzyl phthalate	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Carbazole	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Caprolactam	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Chloroaniline	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Chloro-3-methylphenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Chloronaphthalene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Chlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Chlorophenyl phenyl ether	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Chrysene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Dibenz(a,h)anthracene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Dibenzofuran	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
3,3'-Dichlorobenzidine	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
<b>Diethyl phthalate</b>	<b>0.023</b>	B, J	5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,4-Dichlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 63 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Dimethyl phthalate	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,4-Dinitrophenol	U	UJ	40.0	1	03/12/12	03/15/12 21:10	R3QA201
<b>Di-n-butyl phthalate</b>	<b>0.679</b>	B, J	5.00	1	03/12/12	03/15/12 21:10	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	10.0	1	03/12/12	03/15/12 21:10	R3QA201
2,4-Dinitrotoluene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,6-Dinitrotoluene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Di-n-octyl phthalate	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Fluoranthene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Fluorene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Hexachlorobenzene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Hexachlorobutadiene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Hexachlorocyclopentadiene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Hexachloroethane	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Indeno(1,2,3-cd)pyrene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Isophorone	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Methylnaphthalene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Methylphenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Methylphenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Naphthalene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Nitroaniline	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
3-Nitroaniline	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Nitroaniline	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Nitrobenzene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2-Nitrophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
4-Nitrophenol	U		10.0	1	03/12/12	03/15/12 21:10	R3QA201
N-Nitrosodimethylamine	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
N-Nitroso-di-n-propylamine	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
N-Nitrosodiphenylamine	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Pentachlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Phenanthrene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Phenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
Pyrene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
1,2,4,5-Tetrachlorobenzene	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,3,4,6-Tetrachlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,4,5-Trichlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201
2,4,6-Trichlorophenol	U		5.00	1	03/12/12	03/15/12 21:10	R3QA201



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	38.7		77 %	21-110	03/12/12	03/15/12 21:10	R3QA201
Surrogate: Phenol-d5	42.0		84 %	10-110	03/12/12	03/15/12 21:10	R3QA201
Surrogate: Nitrobenzene-d5	23.1		92 %	35-114	03/12/12	03/15/12 21:10	R3QA201
Surrogate: 2-Fluorobiphenyl	21.3		85 %	43-116	03/12/12	03/15/12 21:10	R3QA201
Surrogate: 2,4,6-Tribromophenol	42.5		85 %	10-123	03/12/12	03/15/12 21:10	R3QA201
Surrogate: Terphenyl-d14	20.8		83 %	33-141	03/12/12	03/15/12 21:10	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	0.6	J	2.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 65 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags	Quantitation Qualifiers	Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2-Dichloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1-Dichloroethene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
cis-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
trans-1,2-Dichloroethene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,3-Dichloropropane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
2,2-Dichloropropane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1-Dichloropropene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
cis-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
trans-1,3-Dichloropropene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Ethylbenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Freon 113	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Hexachlorobutadiene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
2-Hexanone	U			2.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Isopropylbenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
p-Isopropyltoluene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Methyl Acetate	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Methylcyclohexane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Methyl-tert-butyl ether	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
<b>Methylene Chloride</b>	<b>0.2</b>	J		0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
4-Methyl-2-pentanone	U			2.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Naphthalene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
n-Propylbenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Styrene	U			1.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Tetrachloroethene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Toluene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1,1-Trichloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,1,2-Trichloroethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Trichloroethene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Trichlorofluoromethane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2,3-Trichloropropane	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Vinyl acetate	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Vinyl chloride	U			0.5	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 66 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012**Volatile Organic Compounds  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 21:29	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.860		96 %	86-115	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.280		107 %	76-114	03/12/12	03/12/12 21:29	CLP trace/R3QA210
Surrogate: Toluene-d8	4.020		100 %	88-110	03/12/12	03/12/12 21:29	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012**Physical Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Dissolved Solids	134		10	1	03/09/12	03/12/12 11:05	SM2540C/R3QA105

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Suspended Solids	U		10	1	03/09/12	03/12/12 11:07	SM2540D/R3QA106

**Classical Chemistry Parameters****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Nitrite + Nitrate as N	0.635	B	0.050	1	03/15/12	03/16/12 15:33	EPA 353.2

**Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Total Nitrogen	U		1.00	1	03/19/12	03/20/12 14:52	EPA 353.2

**Anions****Targets**

Analyte	Result mg/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Bromide	U		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Chloride	6.72	B	0.250	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Fluoride	U		0.100	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108
Sulfate as SO4	12.9		0.500	1	03/14/12	03/14/12 11:02	EPA 300.0/R3QA108

**HPLC Identification****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2-Butoxyethanol	U		25.0	1	03/13/12	03/14/12 22:05	SW846 8321/ASTM D773-11 Modified
Diethylene Glycol	U		50.0	1	03/13/12	03/14/12 22:05	SW846 8321/ASTM D773-11 Modified
2-Methoxyethanol	U		10.0	1	03/13/12	03/14/12 13:09	SW846 8321/ASTM D773-11 Modified

1203001 FINAL

DAS R33937

03 28 12 813

Page 68 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012**HPLC Identification  
Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Tetraethylene Glycol	U		25.0	1	03/13/12	03/14/12 22:05	SW846 8321/ASTM D773-11 Modified
Triethylene Glycol	U		25.0	1	03/13/12	03/14/12 22:05	SW846 8321/ASTM D773-11 Modified

**Semivolatile Organic Compounds  
Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acenaphthene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Acenaphthylene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Acetophenone	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Anthracene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Atrazine	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzaldehyde	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzo(a)anthracene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzo(a)pyrene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzo(b)fluoranthene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzo(ghi)perylene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Benzo(k)fluoranthene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
1,1-Biphenyl	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Bis(2-chloroethoxy)methane	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Bis(2-chloroethyl)ether	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Bis(2-chloroisopropyl)ether	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.229</b>	B, J	5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Bromophenyl phenyl ether	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
<b>Butyl benzyl phthalate</b>	<b>0.028</b>	J	5.00	1	03/12/12	03/15/12 22:00	R3QA201
Carbazole	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Caprolactam	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Chloroaniline	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Chloro-3-methylphenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Chloronaphthalene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Chlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Chlorophenyl phenyl ether	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Chrysene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Dibenz(a,h)anthracene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Dibenzofuran	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
3,3'-Dichlorobenzidine	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
<b>Diethyl phthalate</b>	<b>0.039</b>	B, J	5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,4-Dichlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201

1203001 FINAL DAS R33937 03 28 12 813  
Page 69 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012

**Semivolatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
2,4-Dimethylphenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Dimethyl phthalate	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,4-Dinitrophenol	U	UJ	40.0	1	03/12/12	03/15/12 22:00	R3QA201
<b>Di-n-butyl phthalate</b>	<b>0.781</b>	B, J	5.00	1	03/12/12	03/15/12 22:00	R3QA201
4,6-Dinitro-2-methylphenol	U	UJ	10.0	1	03/12/12	03/15/12 22:00	R3QA201
2,4-Dinitrotoluene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,6-Dinitrotoluene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Di-n-octyl phthalate	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Fluoranthene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Fluorene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Hexachlorobenzene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Hexachlorobutadiene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Hexachlorocyclopentadiene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Hexachloroethane	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Indeno(1,2,3-cd)pyrene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Isophorone	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Methylnaphthalene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Methylphenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Methylphenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Naphthalene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Nitroaniline	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
3-Nitroaniline	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Nitroaniline	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Nitrobenzene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2-Nitrophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
4-Nitrophenol	U		10.0	1	03/12/12	03/15/12 22:00	R3QA201
N-Nitrosodimethylamine	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
N-Nitroso-di-n-propylamine	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
N-Nitrosodiphenylamine	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Pentachlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Phenanthrene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Phenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
Pyrene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
1,2,4,5-Tetrachlorobenzene	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,3,4,6-Tetrachlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,4,5-Trichlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201
2,4,6-Trichlorophenol	U		5.00	1	03/12/12	03/15/12 22:00	R3QA201



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012**Semivolatile Organic Compounds****Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	%Recovery Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 2-Fluorophenol	31.8		64 %	21-110	03/12/12	03/15/12 22:00	R3QA201
Surrogate: Phenol-d5	36.5		73 %	10-110	03/12/12	03/15/12 22:00	R3QA201
Surrogate: Nitrobenzene-d5	22.0		88 %	35-114	03/12/12	03/15/12 22:00	R3QA201
Surrogate: 2-Fluorobiphenyl	20.7		83 %	43-116	03/12/12	03/15/12 22:00	R3QA201
Surrogate: 2,4,6-Tribromophenol	40.6		81 %	10-123	03/12/12	03/15/12 22:00	R3QA201
Surrogate: Terphenyl-d14	20.2		81 %	33-141	03/12/12	03/15/12 22:00	R3QA201

**Volatile Organic Compounds****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
<b>Acetone</b>	<b>0.3</b>	B, J	2.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 71 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Freon 113	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Methylene Chloride	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210

1203001 FINAL DAS R33937

03 28 12 813

Page 72 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 21:57	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.960		99 %	86-115	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.210		105 %	76-114	03/12/12	03/12/12 21:57	CLP trace/R3QA210
Surrogate: Toluene-d8	4.060		102 %	88-110	03/12/12	03/12/12 21:57	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB52**Lab ID:** 1203001-13**Sample Matrix:** Water**Date Collected:** 03/08/2012

**Volatile Organic Compounds**  
**Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Acetone	0.4	J	2.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Benzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Bromobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Bromochloromethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Bromodichloromethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Bromoform	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Bromomethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
2-Butanone	U		2.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
sec-Butylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
tert-Butylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
n-Butylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Carbon disulfide	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Carbon Tetrachloride	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Chlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Chlorodibromomethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Chloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Chloroform	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Chloromethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
2-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
4-Chlorotoluene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Cyclohexane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2-Dibromo-3-chloropropane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2-Dibromoethane (EDB)	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Dibromomethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,3-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,4-Dichlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Dichlorodifluoromethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1-Dichloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2-Dichloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1-Dichloroethene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
cis-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
trans-1,2-Dichloroethene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,3-Dichloropropane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
2,2-Dichloropropane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1-Dichloropropene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
cis-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
trans-1,3-Dichloropropene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Ethylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210

1203001 FINAL

DAS R33937

03 28 12 813

Page 74 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** TB52**Lab ID:** 1203001-13**Sample Matrix:** Water**Date Collected:** 03/08/2012

**Volatile Organic Compounds**  
**Targets (Continued)**

Analyte	Result ug/L	Flags Qualifiers	Quantitation Limit	Dilution	Prepared	Analyzed	Method/SOP#
Freon 113	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Hexachlorobutadiene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
2-Hexanone	U		2.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Isopropylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
p-Isopropyltoluene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Methyl Acetate	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Methylcyclohexane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Methyl-tert-butyl ether	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
<b>Methylene Chloride</b>	<b>0.2</b>	J	0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
4-Methyl-2-pentanone	U		2.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Naphthalene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
n-Propylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Styrene	U		1.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1,2,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1,1,2-Tetrachloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Tetrachloroethene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Toluene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2,3-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2,4-Trichlorobenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1,1-Trichloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,1,2-Trichloroethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Trichloroethene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Trichlorofluoromethane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2,3-Trichloropropane	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,2,4-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
1,3,5-Trimethylbenzene	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Vinyl acetate	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Vinyl chloride	U		0.5	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
m-Xylene/p-Xylene	U		1.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210
o-Xylene	U		1.0	1	03/12/12	03/12/12 22:26	CLP trace/R3QA210

**Surrogates**

Analyte	Result ug/L	Flags Qualifiers	%Recovery %Recovery	Limits	Prepared	Analyzed	Method/SOP#
Surrogate: 4-Bromofluorobenzene	3.870		97 %	86-115	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Surrogate: 1,2-Dichloroethane-d4	4.160		104 %	76-114	03/12/12	03/12/12 22:26	CLP trace/R3QA210
Surrogate: Toluene-d8	4.060		102 %	88-110	03/12/12	03/12/12 22:26	CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB19**Lab ID:** 1203001-01**Sample Matrix:** Water**Date Collected:** 03/05/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation				Method/SOP#
			Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Barium	U		10.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Calcium	U		500	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Copper	U		2.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Lithium	U		200	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Magnesium	U		500	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Sodium	U		1000	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Tin	U		200	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:23	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116
Zinc	U		2.0	2.5	03/12/12	03/14/12 13:00	EPA 200.8/R3QA116

1203001 FINAL

DAS R33937

03 28 12 813

Page 76 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW60**Lab ID:** 1203001-02**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Arsenic</b>	<b>9.3</b>		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Barium</b>	<b>1650</b>		200	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Calcium</b>	<b>29800</b>		500	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Copper</b>	<b>3.0</b>		2.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Iron</b>	<b>754</b>		100	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Lithium</b>	<b>47.7</b>		25.0	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>7490</b>		500	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
<b>Manganese</b>	<b>217</b>		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Sodium</b>	<b>20300</b>		1000	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
<b>Strontium</b>	<b>865</b>		200	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Tin	U		200	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:27	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116
<b>Zinc</b>	<b>2.6</b>		2.0	2.5	03/12/12	03/14/12 13:10	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW56**Lab ID:** 1203001-04**Sample Matrix:** Drinking Water**Date Collected:** 03/05/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Arsenic</b>	<b>1.5</b>		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Barium</b>	<b>531</b>		200	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Calcium</b>	<b>22600</b>		500	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Copper</b>	<b>2.4</b>		2.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Iron</b>	<b>171</b>		100	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Lithium</b>	<b>30.5</b>		25.0	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>3550</b>		500	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
<b>Manganese</b>	<b>90.7</b>		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
<b>Sodium</b>	<b>10600</b>		1000	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
<b>Strontium</b>	<b>369</b>		200	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Tin	U		200	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:38	EPA 200.7/R3QA159
<b>Uranium</b>	<b>1.0</b>		1.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116
Zinc	U		2.0	2.5	03/12/12	03/14/12 13:21	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB20**Lab ID:** 1203001-06**Sample Matrix:** Water**Date Collected:** 03/06/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags Qualifiers	Quantitation				Method/SOP#
			Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Barium	U		10.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Calcium	U		500	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Copper	U		2.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Magnesium	U		500	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Sodium	U		1000	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Tin	U		200	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:41	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116
Zinc	U		2.0	2.5	03/12/12	03/14/12 13:26	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61-P**Lab ID:** 1203001-07**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Barium</b>	<b>73.1</b>		10.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Calcium</b>	<b>32500</b>		500	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Copper</b>	<b>46.7</b>		2.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>6990</b>		500	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Nickel</b>	<b>1.1</b>		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Sodium</b>	<b>16800</b>		1000	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Tin	U		200	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:45	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116
<b>Zinc</b>	<b>11.0</b>		2.0	2.5	03/12/12	03/14/12 13:31	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61z**Lab ID:** 1203001-08**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Barium</b>	<b>75.1</b>		10.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Calcium</b>	<b>33000</b>		500	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Copper</b>	<b>22.4</b>		2.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>7200</b>		500	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Nickel</b>	<b>1.2</b>		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Sodium</b>	<b>16400</b>		1000	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Tin	U	UJ	200	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 10:56	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116
<b>Zinc</b>	<b>16.9</b>		2.0	2.5	03/12/12	03/14/12 13:36	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW61**Lab ID:** 1203001-09**Sample Matrix:** Drinking Water**Date Collected:** 03/06/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Barium</b>	<b>68.4</b>		10.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Calcium</b>	<b>31900</b>		500	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Copper</b>	<b>20.5</b>		2.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>7040</b>		500	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Nickel</b>	<b>1.0</b>		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Sodium</b>	<b>16100</b>		1000	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Tin	U	UJ	200	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 11:00	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116
<b>Zinc</b>	<b>15.5</b>		2.0	2.5	03/12/12	03/14/12 13:41	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** FB21**Lab ID:** 1203001-11**Sample Matrix:** Water**Date Collected:** 03/08/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Arsenic	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Barium	U		10.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Calcium	U		500	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Copper	U		2.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Magnesium	U		500	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Manganese	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Sodium	U		1000	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Strontium	U		200	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Tin	U	UJ	200	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 11:07	EPA 200.7/R3QA159
Uranium	U		1.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116
Zinc	U		2.0	2.5	03/12/12	03/14/12 13:51	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

**Site Name:** Dimock Residential Groundwater**Project #:** DAS R33937**Station ID:** HW50**Lab ID:** 1203001-12**Sample Matrix:** Drinking Water**Date Collected:** 03/08/2012**Total Metals****Targets**

Analyte	Result ug/L	Flags	Quantitation				Method/SOP#
		Qualifiers	Limit	Dilution	Prepared	Analyzed	
Aluminum	U		30.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Antimony	U		2.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
<b>Arsenic</b>	<b>1.9</b>		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
<b>Barium</b>	<b>238</b>		10.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Beryllium	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Boron	U		50.0	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Cadmium	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
<b>Calcium</b>	<b>30200</b>		500	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Chromium	U		2.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Cobalt	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Copper	U		2.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Iron	U		100	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Lead	U		2.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Lithium	U		25.0	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
<b>Magnesium</b>	<b>8330</b>		500	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
<b>Manganese</b>	<b>27.9</b>		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Nickel	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Potassium	U		2000	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Selenium	U		5.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Silver	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
<b>Sodium</b>	<b>10100</b>		1000	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
<b>Strontium</b>	<b>1020</b>		200	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Thallium	U		1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Tin	U	UJ	200	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
Titanium	U		200	1	03/12/12	03/13/12 11:11	EPA 200.7/R3QA159
<b>Uranium</b>	<b>1.2</b>	UJ	1.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Vanadium	U		5.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116
Zinc	U		2.0	2.5	03/12/12	03/15/12 13:56	EPA 200.8/R3QA116



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## Tentatively Identified Compound (TIC) Report Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
<b>Lab ID:</b>	1203001-01					
<b>Station ID:</b>	FB19					
<b>Sample Matrix:</b>	Water					
<b>Collected:</b>	03/05/2012					
75-98-9	Propanoic acid, 2,2-dimethyl-	2.01	T	2.74	03/10/12 01:26	R3QA201
556-67-2	Cyclotetrasiloxane, octamethyl-	2.25	T	4.00	03/10/12 01:26	R3QA201
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl-	6.04	T	4.06	03/10/12 01:26	R3QA201
104-76-7	1-Hexanol, 2-ethyl-	85.0	T	4.30	03/10/12 01:26	R3QA201
72218-58-7	3-Methylheptyl acetate	4.69	T	5.11	03/10/12 01:26	R3QA201
7659-86-1	2-Ethylhexyl mercaptoacetate	112	T	6.90	03/10/12 01:26	R3QA201
57-10-3	n-Hexadecanoic acid	4.40	T	9.43	03/10/12 01:26	R3QA201
112-79-8	9-Octadecenoic acid, (E)-	10.0	T	10.20	03/10/12 01:26	R3QA201
57-11-4	Octadecanoic acid	8.54	T	10.27	03/10/12 01:26	R3QA201
629-97-0	Docosane	10.4	T	10.40	03/10/12 01:26	R3QA201
015869-94-0	Octane, 3,6-dimethyl-	3.95	T	10.88	03/10/12 01:26	R3QA201
NA	unknown (01)	17.5	T	11.31	03/10/12 01:26	R3QA201
NA	unknown (02)	2.67	T	11.41	03/10/12 01:26	R3QA201
NA	unknown (03)	4.79	T	11.45	03/10/12 01:26	R3QA201
24468-13-1	dl-2-Ethylhexyl chloroformate	6.11	T	11.54	03/10/12 01:26	R3QA201
NA	unknown (04)	8.33	T	12.12	03/10/12 01:26	R3QA201
NA	unknown (05)	23.4	T	12.19	03/10/12 01:26	R3QA201
NA	unknown (06)	4.73	T	12.26	03/10/12 01:26	R3QA201
7683-64-9	Squalene	3.75	T	12.75	03/10/12 01:26	R3QA201
NA	unknown (07)	6.92	T	17.13	03/10/12 01:26	R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
<b>Lab ID:</b>	1203001-01					
<b>Station ID:</b>	FB19					
<b>Sample Matrix:</b>	Water					
<b>Collected:</b>	03/05/2012					
75-28-5	Isobutane	3.8	T	1.33	03/12/12 16:52	CLP trace/R3QA210



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**Tentatively Identified Compound (TIC) Report**  
**Semivolatile Organic Compounds**

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
<b>Lab ID:</b>	1203001-02					
<b>Station ID:</b>	HW60					
<b>Sample Matrix:</b>	Drinking Water					
<b>Collected:</b>	03/05/2012					
10544-50-0	Cyclic octaatomic sulfur	178		T	9.98	03/09/12 18:48 R3QA201

**Volatile Organic Compounds**

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
<b>Lab ID:</b>	1203001-02					
<b>Station ID:</b>	HW60					
<b>Sample Matrix:</b>	Drinking Water					
<b>Collected:</b>	03/05/2012					
7446-09-5	Sulfur dioxide	16.0		T	1.33	03/12/12 17:19 CLP trace/R3QA210

**Volatile Organic Compounds**

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
<b>Lab ID:</b>	1203001-03					
<b>Station ID:</b>	TB49					
<b>Sample Matrix:</b>	Water					
<b>Collected:</b>	03/05/2012					
7446-09-5	Sulfur dioxide	2.1		T	1.23	03/12/12 17:46 CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## Tentatively Identified Compound (TIC) Report

## Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

Lab ID: 1203001-04  
Station ID: HW56  
Sample Matrix: Drinking Water  
Collected: 03/05/2012

None Detected 0.00 03/09/12 19:38 R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

Lab ID: 1203001-04  
Station ID: HW56  
Sample Matrix: Drinking Water  
Collected: 03/05/2012

None Detected 0.0 03/12/12 18:13 CLP trace/R3QA210

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

Lab ID: 1203001-05  
Station ID: TB50  
Sample Matrix: Water  
Collected: 03/05/2012

None Detected 0.0 03/12/12 18:40 CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## Tentatively Identified Compound (TIC) Report

### Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-06**Station ID:** FB20**Sample Matrix:** Water**Collected:** 03/06/2012

None Detected

0.00

03/09/12 22:07 R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-06**Station ID:** FB20**Sample Matrix:** Water**Collected:** 03/06/2012

75-28-5 Isobutane

1.1

T

1.34

03/12/12 19:07

CLP trace/R3QA210

## Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-07**Station ID:** HW61-P**Sample Matrix:** Drinking Water**Collected:** 03/06/2012

None Detected

0.00

03/09/12 22:57 R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-07**Station ID:** HW61-P**Sample Matrix:** Drinking Water**Collected:** 03/06/2012

420-56-4 Trimethylsilyl fluoride

0.2

T

1.60

03/12/12 19:35

CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 88 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## Tentatively Identified Compound (TIC) Report

## Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-08  
**Station ID:** HW61z  
**Sample Matrix:** Drinking Water  
**Collected:** 03/06/2012

None Detected 0.00 03/09/12 23:47 R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-08  
**Station ID:** HW61z  
**Sample Matrix:** Drinking Water  
**Collected:** 03/06/2012

None Detected 0.0 03/12/12 20:03 CLP trace/R3QA210

## Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-09  
**Station ID:** HW61  
**Sample Matrix:** Drinking Water  
**Collected:** 03/06/2012

None Detected 0.00 03/10/12 00:37 R3QA201

## Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-09  
**Station ID:** HW61  
**Sample Matrix:** Drinking Water  
**Collected:** 03/06/2012

None Detected 0.0 03/12/12 20:32 CLP trace/R3QA210

1203001 FINAL DAS R33937 03 28 12 813  
Page 89 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

### Tentatively Identified Compound (TIC) Report Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-10**Station ID:** TB51**Sample Matrix:** Water**Collected:** 03/06/2012

None Detected

0.0

03/12/12 21:01

CLP trace/R3QA210

### Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-11**Station ID:** FB21**Sample Matrix:** Water**Collected:** 03/08/2012

None Detected

0.00

03/15/12 21:10

R3QA201

### Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-11**Station ID:** FB21**Sample Matrix:** Water**Collected:** 03/08/2012

None Detected

0.0

03/12/12 21:29

CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

### Tentatively Identified Compound (TIC) Report Semivolatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-12  
**Station ID:** HW50  
**Sample Matrix:** Drinking Water  
**Collected:** 03/08/2012

None Detected 0.00 03/15/12 22:00 R3QA201

### Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-12  
**Station ID:** HW50  
**Sample Matrix:** Drinking Water  
**Collected:** 03/08/2012

None Detected 0.0 03/12/12 21:57 CLP trace/R3QA210

### Volatile Organic Compounds

CAS Number	Compound	Result ug/L	Analyte Qualifiers	Retention Time	Analyzed	Method/SOP#
------------	----------	----------------	--------------------	----------------	----------	-------------

**Lab ID:** 1203001-13  
**Station ID:** TB52  
**Sample Matrix:** Water  
**Collected:** 03/08/2012

None Detected 0.0 03/12/12 22:26 CLP trace/R3QA210



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Physical Parameters**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	-----------	-------------	---------	-----------	-------

**Batch BC20901 - TDS/TSS prep**

Blank (BC20901-BLK1)				Prepared: 03/09/12 13:32 Analyzed: 03/12/12 11:05			
Total Dissolved Solids	U	10	mg/L				
Duplicate (BC20901-DUP1)				Source: 1203001-04 Prepared: 03/09/12 13:32 Analyzed: 03/12/12 11:05			
Total Dissolved Solids	108	10	mg/L	95		13	20
Reference (BC20901-SRM1)				Prepared: 03/09/12 13:32 Analyzed: 03/12/12 11:05			
Total Dissolved Solids	247		mg/L	250.00	99	74-126	

**Batch BC20902 - TDS/TSS prep**

Blank (BC20902-BLK1)				Prepared: 03/09/12 13:34 Analyzed: 03/12/12 11:07			
Total Suspended Solids	U	10	mg/L				
Duplicate (BC20902-DUP1)				Source: 1203001-04 Prepared: 03/09/12 13:34 Analyzed: 03/12/12 11:07			
Total Suspended Solids	U	10	mg/L	0		20	
Reference (BC20902-SRM1)				Prepared: 03/09/12 13:34 Analyzed: 03/12/12 11:07			
Total Suspended Solids	44		mg/L	46.200	95	77-115	



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Classical Chemistry Parameters**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21501 - Nutrient Prep**

<b>Blank (BC21501-BLK1)</b>					Prepared: 03/15/12 09:25	Analyzed: 03/16/12 15:16				
Nitrite + Nitrate as N	U	0.050	mg/L							
<b>LCS (BC21501-BS1)</b>					Prepared: 03/15/12 09:25	Analyzed: 03/16/12 15:19				
Nitrite + Nitrate as N	3.110	0.050	mg/L	3.0000		104	85-115			
<b>Duplicate (BC21501-DUP1)</b>		<b>Source: 1203001-02</b>			Prepared: 03/15/12 09:25	Analyzed: 03/16/12 15:24				
Nitrite + Nitrate as N	U	0.050	mg/L		U			20		
<b>MRL Check (BC21501-MRL1)</b>					Prepared: 03/15/12 09:25	Analyzed: 03/16/12 15:20				
Nitrite + Nitrate as N	0.035	0.050	mg/L	0.050000		70	60-140			
<b>Matrix Spike (BC21501-MS1)</b>		<b>Source: 1203001-04</b>			Prepared: 03/15/12 09:25	Analyzed: 03/16/12 15:26				
Nitrite + Nitrate as N	1.006	0.050	mg/L	1.0000	U	101	85-115			

**Batch BC21502 - Nutrient Prep**

<b>Blank (BC21502-BLK1)</b>					Prepared: 03/19/12 09:31	Analyzed: 03/20/12 14:32				
Total Nitrogen	U	1.00	mg/L							
<b>LCS (BC21502-BS1)</b>					Prepared: 03/19/12 09:31	Analyzed: 03/20/12 14:35				
Total Nitrogen	4.94	1.00	mg/L	5.0000		99	85-115			
<b>Duplicate (BC21502-DUP1)</b>		<b>Source: 1203001-02</b>			Prepared: 03/19/12 09:31	Analyzed: 03/20/12 14:41				
Total Nitrogen	U	1.00	mg/L		U			20		
<b>MRL Check (BC21502-MRL1)</b>					Prepared: 03/19/12 09:31	Analyzed: 03/20/12 14:37				
Total Nitrogen	0.750300	1.00	mg/L	1.0000		75	60-140			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Classical Chemistry Parameters**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21502 - Nutrient Prep****Matrix Spike (BC21502-MS1)****Source: 1203001-04**

Prepared: 03/19/12 09:31

Analyzed: 03/20/12 14:44

Total Nitrogen      4.47      1.00      mg/L      5.0000      U      89      85-115



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

## QC Data

## Anions

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

## Batch BC21401 - Anions Water Prep

**Blank (BC21401-BLK1)** Prepared: 03/14/12 09:14 Analyzed: 03/14/12 11:02

Bromide	U	0.500	mg/L							
Chloride	U	0.250	"							
Fluoride	U	0.100	"							
Sulfate as SO <sub>4</sub>	U	0.500	"							

**LCS (BC21401-BS1)** Prepared: 03/14/12 09:14 Analyzed: 03/14/12 11:02

Bromide	10.0	0.500	mg/L	10.000	100	90-110				
Chloride	5.03	0.250	"	5.0000	101	90-110				
Fluoride	2.00	0.100	"	2.0000	100	90-110				
Sulfate as SO <sub>4</sub>	10.0	0.500	"	10.000	100	90-110				

**Duplicate (BC21401-DUP1)** Source: 1203001-12 Prepared: 03/14/12 09:14 Analyzed: 03/14/12 11:02

Bromide	U	0.500	mg/L	U						15
Chloride	6.78	0.250	"	6.72					0.9	10
Fluoride	U	0.100	"	U						10
Sulfate as SO <sub>4</sub>	12.9	0.500	"	12.9					0	10

**Matrix Spike (BC21401-MS1)** Source: 1203001-12 Prepared: 03/14/12 09:14 Analyzed: 03/14/12 11:02

Bromide	4.74	0.500	mg/L	5.0000	U	95	91.9-105.3			
Chloride	9.19	0.250	"	2.5000	6.72	99	85-112.7			
Fluoride	0.881	0.100	"	1.0000	U	88	80.5-121.4			
Sulfate as SO <sub>4</sub>	17.7	0.500	"	5.0000	12.9	96	86.4-112.5			

**Reference (BC21401-SRM1)** Prepared: 03/14/12 09:14 Analyzed: 03/14/12 11:02

Bromide	10.1	mg/L	10.000	101	90-110					
Chloride	5.04	"	5.0000	101	90-110					
Fluoride	1.98	"	2.0000	99	90-110					
Sulfate as SO <sub>4</sub>	10.2	"	10.000	102	90-110					



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**HPLC Identification**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21302 - LC/MS prep****Blank (BC21302-BLK1)**

2-Butoxyethanol	U	25.0	ug/L							
Diethylene Glycol	U	50.0	"							
2-Methoxyethanol	U	10.0	"							
Tetraethylene Glycol	U	25.0	"							
Triethylene Glycol	U	25.0	"							

Prepared: 03/13/12 09:45 Analyzed: 03/14/12 19:00

**LCS (BC21302-BS1)**

2-Butoxyethanol	98.2	25.0	ug/L	100.00	98	80-120				
Diethylene Glycol	95.5	50.0	"	100.00	96	80-120				
2-Methoxyethanol	105	10.0	"	100.00	105	80-120				
Tetraethylene Glycol	85.6	25.0	"	100.00	86	80-120				
Triethylene Glycol	112	25.0	"	100.00	112	80-120				

Prepared: 03/13/12 09:45 Analyzed: 03/14/12 22:46

**Matrix Spike (BC21302-MS1)**

2-Butoxyethanol	93.1	25.0	ug/L	100.00	0.0	93	70-130			
Diethylene Glycol	110	50.0	"	100.00	0.0	110	70-130			
2-Methoxyethanol	95.3	10.0	"	96.600	0.0	99	70-130			
Tetraethylene Glycol	102	25.0	"	100.00	0.0	102	70-130			
Triethylene Glycol	103	25.0	"	100.00	0.0	103	70-130			

Source: 1203001-04 Prepared: 03/13/12 09:45 Analyzed: 03/14/12 23:06

**Matrix Spike Dup (BC21302-MSD1)**

2-Butoxyethanol	99.3	25.0	ug/L	100.00	0.0	99	70-130	6	25	
Diethylene Glycol	112	50.0	"	100.00	0.0	112	70-130	1	25	
2-Methoxyethanol	98.7	10.0	"	96.600	0.0	102	70-130	4	25	
Tetraethylene Glycol	105	25.0	"	100.00	0.0	105	70-130	3	25	
Triethylene Glycol	104	25.0	"	100.00	0.0	104	70-130	1	25	

Source: 1203001-04 Prepared: 03/13/12 09:45 Analyzed: 03/14/12 23:27



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC20802 - EPA 3520C SVOC****Blank (BC20802-BLK1)**

Prepared: 03/08/12 12:55    Analyzed: 03/09/12 15:27

Acenaphthene	U	5.00	ug/L							
Acenaphthylene	U	5.00	"							
Acetophenone	U	5.00	"							
Anthracene	U	5.00	"							
Atrazine	U	5.00	"							
Benzaldehyde	U	5.00	"							
Benzo(a)anthracene	U	5.00	"							
Benzo(a)pyrene	U	5.00	"							
Benzo(b)fluoranthene	U	5.00	"							
Benzo(ghi)perylene	U	5.00	"							
Benzo(k)fluoranthene	U	5.00	"							UJ
1,1-Biphenyl	U	5.00	"							
Bis(2-chloroethoxy)methane	U	5.00	"							
Bis(2-chloroethyl)ether	U	5.00	"							
Bis(2-chloroisopropyl)ether	U	5.00	"							
Bis(2-ethylhexyl)phthalate	0.460	5.00	"							J
4-Bromophenyl phenyl ether	U	5.00	"							
Butyl benzyl phthalate	0.095	5.00	"							J
Carbazole	U	5.00	"							
Caprolactam	U	5.00	"							
4-Chloroaniline	U	5.00	"							
4-Chloro-3-methylphenol	U	5.00	"							
2-Chloronaphthalene	U	5.00	"							
2-Chlorophenol	U	5.00	"							
4-Chlorophenyl phenyl ether	U	5.00	"							
Chrysene	U	5.00	"							
Dibenz(a,h)anthracene	U	5.00	"							
Dibenzofuran	U	5.00	"							
3,3'-Dichlorobenzidine	U	5.00	"							
Diethyl phthalate	0.038	5.00	"							J
2,4-Dichlorophenol	U	5.00	"							
2,4-Dimethylphenol	U	5.00	"							
Dimethyl phthalate	U	5.00	"							
2,4-Dinitrophenol	U	5.00	"							UJ
Di-n-butyl phthalate	1.12	5.00	"							J
4,6-Dinitro-2-methylphenol	U	10.0	"							UJ
2,4-Dinitrotoluene	U	5.00	"							
2,6-Dinitrotoluene	U	5.00	"							
Di-n-octyl phthalate	U	5.00	"							
Fluoranthene	U	5.00	"							
Fluorene	U	5.00	"							

1203001 FINAL

DAS R33937

03 28 12 813

Page 97 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC20802 - EPA 3520C SVOC****Blank (BC20802-BLK1)**

Prepared: 03/08/12 12:55    Analyzed: 03/09/12 15:27

Hexachlorobenzene	U	5.00	ug/L							
Hexachlorobutadiene	U	5.00	"							
Hexachlorocyclopentadiene	U	5.00	"							
Hexachloroethane	U	5.00	"							
Indeno(1,2,3-cd)pyrene	U	5.00	"							
Isophorone	U	5.00	"							
1-Methylnaphthalene	U	5.00	"							
2-Methylnaphthalene	U	5.00	"							
2-Methylphenol	U	5.00	"							
4-Methylphenol	U	5.00	"							
Naphthalene	U	5.00	"							
2-Nitroaniline	U	5.00	"							
3-Nitroaniline	U	5.00	"							
4-Nitroaniline	U	5.00	"							
Nitrobenzene	U	5.00	"							
2-Nitrophenol	U	5.00	"							
4-Nitrophenol	U	10.0	"							
N-Nitrosodimethylamine	U	5.00	"							
N-Nitroso-di-n-propylamine	U	5.00	"							
N-Nitrosodiphenylamine	U	5.00	"							
Pentachlorophenol	U	5.00	"							
Phenanthrene	U	5.00	"							
Phenol	U	5.00	"							
Pyrene	U	5.00	"							
1,2,4,5-Tetrachlorobenzene	U	5.00	"							
2,3,4,6-Tetrachlorophenol	U	5.00	"							
2,4,5-Trichlorophenol	U	5.00	"							
2,4,6-Trichlorophenol	U	5.00	"							
<i>Surrogate: 2-Fluorophenol</i>	31.0		"	50.000		62	21-110			
<i>Surrogate: Phenol-d5</i>	36.4		"	50.000		73	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	18.1		"	25.000		72	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	18.0		"	25.000		72	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	42.5		"	50.000		85	10-123			
<i>Surrogate: Terphenyl-d14</i>	20.1		"	25.000		80	33-141			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC20802 - EPA 3520C SVOC**

LCS (BC20802-BS1)					Prepared: 03/08/12 12:55	Analyzed: 03/09/12 16:17				
Benzo(a)pyrene	5.67	5.00	ug/L	5.0000	113	30-150				
Bis(2-chloroethyl)ether	4.56	5.00	"	5.0000	91	30-150			J	
4-Chloroaniline	4.22	5.00	"	5.0000	84	30-150			J	
4-Chloro-3-methylphenol	4.80	5.00	"	5.0000	96	26-103			J	
2-Chlorophenol	4.22	5.00	"	5.0000	84	25-102			J	
Diethyl phthalate	5.05	5.00	"	5.0000	101	30-150				
2,4-Dinitrotoluene	4.35	5.00	"	5.0000	87	28-89			J	
Hexachlorobenzene	5.15	5.00	"	5.0000	103	30-150				
Hexachlorobutadiene	4.46	5.00	"	5.0000	89	30-150			J	
Hexachloroethane	3.88	5.00	"	5.0000	78	30-150			J	
Isophorone	4.75	5.00	"	5.0000	95	30-150			J	
1-Methylnaphthalene	5.15	5.00	"	5.0000	103	30-150				
Naphthalene	5.07	5.00	"	5.0000	101	30-150				
Nitrobenzene	4.65	5.00	"	5.0000	93	30-150			J	
4-Nitrophenol	3.63	10.0	"	5.0000	73	11-114			J	
N-Nitroso-di-n-propylamine	4.50	5.00	"	5.0000	90	41-126			J	
N-Nitrosodiphenylamine	6.78	5.00	"	5.0000	136	30-150				
Pentachlorophenol	1.75	5.00	"	5.0000	35	17-109			J	
Phenol	4.32	5.00	"	5.0000	86	26-90			J	
2,4,5-Trichlorophenol	4.82	5.00	"	5.0000	96	30-150			J	
2,4,6-Trichlorophenol	4.69	5.00	"	5.0000	94	30-150			J	
<i>Surrogate: 2-Fluorophenol</i>	37.2		"	50.000	74	21-110				
<i>Surrogate: Phenol-d5</i>	42.0		"	50.000	84	10-110				
<i>Surrogate: Nitrobenzene-d5</i>	20.9		"	25.000	84	35-114				
<i>Surrogate: 2-Fluorobiphenyl</i>	21.1		"	25.000	84	43-116				
<i>Surrogate: 2,4,6-Tribromophenol</i>	50.3		"	50.000	101	10-123				
<i>Surrogate: Terphenyl-d14</i>	21.4		"	25.000	86	33-141				



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC20802 - EPA 3520C SVOC**

LCS (BC20802-BS2)		Prepared: 03/08/12 12:55			Analyzed: 03/09/12 17:07		
Benzo(a)pyrene	42.5	5.00	ug/L	40.000	106	30-150	
Bis(2-chloroethyl)ether	31.7	5.00	"	40.000	79	30-150	
4-Chloroaniline	36.4	5.00	"	40.000	91	30-150	
4-Chloro-3-methylphenol	37.2	5.00	"	40.000	93	26-103	
2-Chlorophenol	30.6	5.00	"	40.000	76	25-102	
Diethyl phthalate	36.7	5.00	"	40.000	92	30-150	
2,4-Dinitrotoluene	37.4	5.00	"	40.000	94	28-89	A
Hexachlorobenzene	36.2	5.00	"	40.000	90	30-150	
Hexachlorobutadiene	29.6	5.00	"	40.000	74	30-150	
Hexachloroethane	26.9	5.00	"	40.000	67	30-150	
Isophorone	34.9	5.00	"	40.000	87	30-150	
1-Methylnaphthalene	33.1	5.00	"	40.000	83	30-150	
Naphthalene	32.9	5.00	"	40.000	82	30-150	
Nitrobenzene	33.9	5.00	"	40.000	85	30-150	
4-Nitrophenol	41.2	10.0	"	40.000	103	11-114	
N-Nitroso-di-n-propylamine	32.0	5.00	"	40.000	80	41-126	
N-Nitrosodiphenylamine	41.2	5.00	"	40.000	103	30-150	
Pentachlorophenol	37.9	5.00	"	40.000	95	17-109	
Phenol	31.4	5.00	"	40.000	79	26-90	
2,4,5-Trichlorophenol	35.6	5.00	"	40.000	89	30-150	
2,4,6-Trichlorophenol	35.0	5.00	"	40.000	88	30-150	
<i>Surrogate: 2-Fluorophenol</i>	37.8		"	50.000	76	21-110	
<i>Surrogate: Phenol-d5</i>	40.4		"	50.000	81	10-110	
<i>Surrogate: Nitrobenzene-d5</i>	21.5		"	25.000	86	35-114	
<i>Surrogate: 2-Fluorobiphenyl</i>	22.1		"	25.000	88	43-116	
<i>Surrogate: 2,4,6-Tribromophenol</i>	51.2		"	50.000	102	10-123	
<i>Surrogate: Terphenyl-d14</i>	23.6		"	25.000	94	33-141	



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC20802 - EPA 3520C SVOC**

LCS (BC20802-BS3)		Prepared: 03/08/12 12:55			Analyzed: 03/09/12 17:58		
Benzo(a)pyrene	21.6	5.00	ug/L	20.000	108	30-150	
Bis(2-chloroethyl)ether	13.7	5.00	"	20.000	69	30-150	
4-Chloroaniline	17.6	5.00	"	20.000	88	30-150	
4-Chloro-3-methylphenol	18.0	5.00	"	20.000	90	26-103	
2-Chlorophenol	13.0	5.00	"	20.000	65	25-102	
Diethyl phthalate	18.4	5.00	"	20.000	92	30-150	
2,4-Dinitrotoluene	17.7	5.00	"	20.000	89	28-89	
Hexachlorobenzene	19.0	5.00	"	20.000	95	30-150	
Hexachlorobutadiene	14.4	5.00	"	20.000	72	30-150	
Hexachloroethane	11.4	5.00	"	20.000	57	30-150	
Isophorone	16.7	5.00	"	20.000	84	30-150	
1-Methylnaphthalene	17.1	5.00	"	20.000	85	30-150	
Naphthalene	16.2	5.00	"	20.000	81	30-150	
Nitrobenzene	15.1	5.00	"	20.000	75	30-150	
4-Nitrophenol	14.9	10.0	"	20.000	75	11-114	
N-Nitroso-di-n-propylamine	15.3	5.00	"	20.000	77	41-126	
N-Nitrosodiphenylamine	23.1	5.00	"	20.000	115	30-150	
Pentachlorophenol	16.2	5.00	"	20.000	81	17-109	
Phenol	14.1	5.00	"	20.000	70	26-90	
2,4,5-Trichlorophenol	17.3	5.00	"	20.000	86	30-150	
2,4,6-Trichlorophenol	16.9	5.00	"	20.000	85	30-150	
<i>Surrogate: 2-Fluorophenol</i>	28.0		"	50.000	56	21-110	
<i>Surrogate: Phenol-d5</i>	35.2		"	50.000	70	10-110	
<i>Surrogate: Nitrobenzene-d5</i>	18.1		"	25.000	72	35-114	
<i>Surrogate: 2-Fluorobiphenyl</i>	19.3		"	25.000	77	43-116	
<i>Surrogate: 2,4,6-Tribromophenol</i>	48.9		"	50.000	98	10-123	
<i>Surrogate: Terphenyl-d14</i>	22.5		"	25.000	90	33-141	



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC20802 - EPA 3520C SVOC**

Matrix Spike (BC20802-MS1)	Source: 1203001-04		Prepared: 03/08/12 12:55		Analyzed: 03/09/12 20:27		
Benzo(a)pyrene	42.4	5.00	ug/L	40.000	0.00	106	30-150
Bis(2-chloroethyl)ether	29.8	5.00	"	40.000	0.00	74	30-150
4-Chloroaniline	31.9	5.00	"	40.000	0.00	80	30-150
4-Chloro-3-methylphenol	36.5	5.00	"	40.000	0.00	91	26-103
2-Chlorophenol	28.2	5.00	"	40.000	0.00	70	25-102
Diethyl phthalate	36.5	5.00	"	40.000	0.035	91	30-150
2,4-Dinitrotoluene	37.4	5.00	"	40.000	0.00	94	28-89
Hexachlorobenzene	35.6	5.00	"	40.000	0.00	89	30-150
Hexachlorobutadiene	27.6	5.00	"	40.000	0.00	69	30-150
Hexachloroethane	22.7	5.00	"	40.000	0.00	57	30-150
Isophorone	33.9	5.00	"	40.000	0.00	85	30-150
1-Methylnaphthalene	32.6	5.00	"	40.000	0.00	82	30-150
Naphthalene	31.2	5.00	"	40.000	0.00	78	30-150
Nitrobenzene	32.4	5.00	"	40.000	0.00	81	30-150
4-Nitrophenol	40.8	10.0	"	40.000	0.00	102	11-114
N-Nitroso-di-n-propylamine	31.1	5.00	"	40.000	0.00	78	41-126
N-Nitrosodiphenylamine	40.9	5.00	"	40.000	0.00	102	30-150
Pentachlorophenol	38.4	5.00	"	40.000	0.00	96	17-109
Phenol	29.8	5.00	"	40.000	0.00	74	26-90
2,4,5-Trichlorophenol	35.8	5.00	"	40.000	0.00	90	30-150
2,4,6-Trichlorophenol	34.8	5.00	"	40.000	0.00	87	30-150
<i>Surrogate: 2-Fluorophenol</i>	33.9		"	50.000		68	21-110
<i>Surrogate: Phenol-d5</i>	38.2		"	50.000		76	10-110
<i>Surrogate: Nitrobenzene-d5</i>	20.7		"	25.000		83	35-114
<i>Surrogate: 2-Fluorobiphenyl</i>	21.6		"	25.000		86	43-116
<i>Surrogate: 2,4,6-Tribromophenol</i>	50.7		"	50.000		101	10-123
<i>Surrogate: Terphenyl-d14</i>	22.9		"	25.000		91	33-141



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC20802 - EPA 3520C SVOC**

Matrix Spike Dup (BC20802-MSD1)	Source: 1203001-04		Prepared: 03/08/12 12:55		Analyzed: 03/09/12 21:17				
Benzo(a)pyrene	41.3	5.00	ug/L	40.000	0.00	103	30-150	3	25
Bis(2-chloroethyl)ether	30.2	5.00	"	40.000	0.00	75	30-150	1	25
4-Chloroaniline	34.2	5.00	"	40.000	0.00	85	30-150	7	25
4-Chloro-3-methylphenol	36.6	5.00	"	40.000	0.00	91	26-103	0.2	33
2-Chlorophenol	29.1	5.00	"	40.000	0.00	73	25-102	3	50
Diethyl phthalate	35.8	5.00	"	40.000	0.035	89	30-150	2	25
2,4-Dinitrotoluene	36.6	5.00	"	40.000	0.00	92	28-89	2	47
Hexachlorobenzene	35.2	5.00	"	40.000	0.00	88	30-150	1	25
Hexachlorobutadiene	32.0	5.00	"	40.000	0.00	80	30-150	15	200
Hexachloroethane	29.1	5.00	"	40.000	0.00	73	30-150	25	25
Isophorone	33.9	5.00	"	40.000	0.00	85	30-150	0.2	25
1-Methylnaphthalene	33.4	5.00	"	40.000	0.00	84	30-150	2	25
Naphthalene	33.3	5.00	"	40.000	0.00	83	30-150	7	25
Nitrobenzene	33.0	5.00	"	40.000	0.00	82	30-150	2	200
4-Nitrophenol	41.6	10.0	"	40.000	0.00	104	11-114	2	50
N-Nitroso-di-n-propylamine	31.1	5.00	"	40.000	0.00	78	41-126	0.3	38
N-Nitrosodiphenylamine	39.2	5.00	"	40.000	0.00	98	30-150	4	25
Pentachlorophenol	37.6	5.00	"	40.000	0.00	94	17-109	2	47
Phenol	30.1	5.00	"	40.000	0.00	75	26-90	1	35
2,4,5-Trichlorophenol	35.7	5.00	"	40.000	0.00	89	30-150	0.4	200
2,4,6-Trichlorophenol	34.3	5.00	"	40.000	0.00	86	30-150	1	200
<i>Surrogate: 2-Fluorophenol</i>	35.9		"	50.000		72	21-110		
<i>Surrogate: Phenol-d5</i>	39.0		"	50.000		78	10-110		
<i>Surrogate: Nitrobenzene-d5</i>	21.1		"	25.000		84	35-114		
<i>Surrogate: 2-Fluorobiphenyl</i>	21.3		"	25.000		85	43-116		
<i>Surrogate: 2,4,6-Tribromophenol</i>	50.6		"	50.000		101	10-123		
<i>Surrogate: Terphenyl-d14</i>	23.1		"	25.000		92	33-141		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21202 - EPA 3520C SVOC****Blank (BC21202-BLK1)**

Prepared: 03/12/12 08:51    Analyzed: 03/15/12 17:48

Acenaphthene	U	5.00	ug/L							
Acenaphthylene	U	5.00	"							
Acetophenone	U	5.00	"							
Anthracene	U	5.00	"							
Atrazine	U	5.00	"							
Benzaldehyde	U	5.00	"							
Benzo(a)anthracene	U	5.00	"							
Benzo(a)pyrene	U	5.00	"							
Benzo(b)fluoranthene	U	5.00	"							
Benzo(ghi)perylene	U	5.00	"							
Benzo(k)fluoranthene	U	5.00	"							
1,1-Biphenyl	U	5.00	"							
Bis(2-chloroethoxy)methane	U	5.00	"							
Bis(2-chloroethyl)ether	U	5.00	"							
Bis(2-chloroisopropyl)ether	U	5.00	"							
Bis(2-ethylhexyl)phthalate	0.207	5.00	"							J
4-Bromophenyl phenyl ether	U	5.00	"							
Butyl benzyl phthalate	U	5.00	"							
Carbazole	U	5.00	"							
Caprolactam	U	5.00	"							
4-Chloroaniline	U	5.00	"							
4-Chloro-3-methylphenol	U	5.00	"							
2-Chloronaphthalene	U	5.00	"							
2-Chlorophenol	U	5.00	"							
4-Chlorophenyl phenyl ether	U	5.00	"							
Chrysene	U	5.00	"							
Dibenz(a,h)anthracene	U	5.00	"							
Dibenzofuran	U	5.00	"							
3,3'-Dichlorobenzidine	U	5.00	"							
Diethyl phthalate	0.021	5.00	"							J
2,4-Dichlorophenol	U	5.00	"							
2,4-Dimethylphenol	U	5.00	"							
Dimethyl phthalate	U	5.00	"							
2,4-Dinitrophenol	U	5.00	"							UJ
Di-n-butyl phthalate	0.813	5.00	"							J
4,6-Dinitro-2-methylphenol	U	10.0	"							UJ
2,4-Dinitrotoluene	U	5.00	"							
2,6-Dinitrotoluene	U	5.00	"							
Di-n-octyl phthalate	U	5.00	"							
Fluoranthene	U	5.00	"							
Fluorene	U	5.00	"							

1203001 FINAL    DAS R33937    03 28 12 813  
Page 104 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21202 - EPA 3520C SVOC****Blank (BC21202-BLK1)**

Prepared: 03/12/12 08:51 Analyzed: 03/15/12 17:48

Hexachlorobenzene	U	5.00	ug/L							
Hexachlorobutadiene	U	5.00	"							
Hexachlorocyclopentadiene	U	5.00	"							
Hexachloroethane	U	5.00	"							
Indeno(1,2,3-cd)pyrene	U	5.00	"							
Isophorone	U	5.00	"							
2-Methylnaphthalene	U	5.00	"							
2-Methylphenol	U	5.00	"							
4-Methylphenol	U	5.00	"							
Naphthalene	U	5.00	"							
2-Nitroaniline	U	5.00	"							
3-Nitroaniline	U	5.00	"							
4-Nitroaniline	U	5.00	"							
Nitrobenzene	U	5.00	"							
2-Nitrophenol	U	5.00	"							
4-Nitrophenol	U	10.0	"							
N-Nitrosodimethylamine	U	5.00	"							
N-Nitroso-di-n-propylamine	U	5.00	"							
N-Nitrosodiphenylamine	U	5.00	"							
Pentachlorophenol	U	5.00	"							
Phenanthrene	U	5.00	"							
Phenol	U	5.00	"							
Pyrene	U	5.00	"							
1,2,4,5-Tetrachlorobenzene	U	5.00	"							
2,3,4,6-Tetrachlorophenol	U	5.00	"							
2,4,5-Trichlorophenol	U	5.00	"							
2,4,6-Trichlorophenol	U	5.00	"							
2-Hexene, 2,5,5-trimethyl-	3.15	"								T
<i>Surrogate: 2-Fluorophenol</i>	34.8	"	50.000		70	21-110				
<i>Surrogate: Phenol-d5</i>	38.5	"	50.000		77	10-110				
<i>Surrogate: Nitrobenzene-d5</i>	21.6	"	25.000		86	35-114				
<i>Surrogate: 2-Fluorobiphenyl</i>	20.0	"	25.000		80	43-116				
<i>Surrogate: 2,4,6-Tribromophenol</i>	41.1	"	50.000		82	10-123				
<i>Surrogate: Terphenyl-d14</i>	21.1	"	25.000		85	33-141				



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21202 - EPA 3520C SVOC****LCS (BC21202-BS1)**

Benzo(a)pyrene	4.65	5.00	ug/L	5.0000	93	30-150			J
Bis(2-chloroethyl)ether	3.79	5.00	"	5.0000	76	30-150			J
4-Chloroaniline	3.89	5.00	"	5.0000	78	30-150			J
4-Chloro-3-methylphenol	4.25	5.00	"	5.0000	85	26-103			J
2-Chlorophenol	3.49	5.00	"	5.0000	70	25-102			J
Diethyl phthalate	4.25	5.00	"	5.0000	85	30-150			J
2,4-Dinitrotoluene	3.65	5.00	"	5.0000	73	28-89			J
Hexachlorobenzene	4.71	5.00	"	5.0000	94	30-150			J
Hexachlorobutadiene	3.16	5.00	"	5.0000	63	30-150			J
Hexachloroethane	2.78	5.00	"	5.0000	56	30-150			J
Isophorone	4.50	5.00	"	5.0000	90	30-150			J
Naphthalene	3.96	5.00	"	5.0000	79	30-150			J
Nitrobenzene	4.10	5.00	"	5.0000	82	30-150			J
4-Nitrophenol	3.19	10.0	"	5.0000	64	11-114			J
N-Nitroso-di-n-propylamine	4.45	5.00	"	5.0000	89	41-126			J
N-Nitrosodiphenylamine	5.52	5.00	"	5.0000	110	30-150			
Pentachlorophenol	0.839	5.00	"	5.0000	17	17-109			J
Phenol	3.77	5.00	"	5.0000	75	26-90			J
2,4,5-Trichlorophenol	4.07	5.00	"	5.0000	81	30-150			J
2,4,6-Trichlorophenol	4.08	5.00	"	5.0000	82	30-150			J
<i>Surrogate: 2-Fluorophenol</i>	31.9		"	50.000	64	21-110			
<i>Surrogate: Phenol-d5</i>	38.8		"	50.000	78	10-110			
<i>Surrogate: Nitrobenzene-d5</i>	20.6		"	25.000	82	35-114			
<i>Surrogate: 2-Fluorobiphenyl</i>	21.0		"	25.000	84	43-116			
<i>Surrogate: 2,4,6-Tribromophenol</i>	44.2		"	50.000	88	10-123			
<i>Surrogate: Terphenyl-d14</i>	21.0		"	25.000	84	33-141			

**LCS (BC21202-BS2)**

Benzo(a)pyrene	41.7	5.00	ug/L	40.000	104	30-150			
Bis(2-chloroethyl)ether	34.4	5.00	"	40.000	86	30-150			
4-Chloroaniline	37.6	5.00	"	40.000	94	30-150			
4-Chloro-3-methylphenol	41.0	5.00	"	40.000	102	26-103			
2-Chlorophenol	33.3	5.00	"	40.000	83	25-102			
Diethyl phthalate	35.3	5.00	"	40.000	88	30-150			
2,4-Dinitrotoluene	39.1	5.00	"	40.000	98	28-89			A
Hexachlorobenzene	34.5	5.00	"	40.000	86	30-150			
Hexachlorobutadiene	27.3	5.00	"	40.000	68	30-150			
Hexachloroethane	25.3	5.00	"	40.000	63	30-150			
Isophorone	40.0	5.00	"	40.000	100	30-150			
Naphthalene	31.6	5.00	"	40.000	79	30-150			
Nitrobenzene	36.5	5.00	"	40.000	91	30-150			

1203001 FINAL

DAS R33937

03 28 12 813

Page 106 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Semivolatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21202 - EPA 3520C SVOC****LCS (BC21202-BS2)**

4-Nitrophenol	39.8	10.0	ug/L	40.000	100	11-114
N-Nitroso-di-n-propylamine	39.0	5.00	"	40.000	98	41-126
N-Nitrosodiphenylamine	41.2	5.00	"	40.000	103	30-150
Pentachlorophenol	35.9	5.00	"	40.000	90	17-109
Phenol	32.9	5.00	"	40.000	82	26-90
2,4,5-Trichlorophenol	38.9	5.00	"	40.000	97	30-150
2,4,6-Trichlorophenol	38.6	5.00	"	40.000	96	30-150
<i>Surrogate: 2-Fluorophenol</i>	39.4		"	50.000	79	21-110
<i>Surrogate: Phenol-d5</i>	42.7		"	50.000	85	10-110
<i>Surrogate: Nitrobenzene-d5</i>	24.9		"	25.000	100	35-114
<i>Surrogate: 2-Fluorobiphenyl</i>	23.7		"	25.000	95	43-116
<i>Surrogate: 2,4,6-Tribromophenol</i>	50.2		"	50.000	100	10-123
<i>Surrogate: Terphenyl-d14</i>	24.0		"	25.000	96	33-141

**LCS (BC21202-BS3)**

Benzo(a)pyrene	19.4	5.00	ug/L	20.000	97	30-150
Bis(2-chloroethyl)ether	14.9	5.00	"	20.000	74	30-150
4-Chloroaniline	16.5	5.00	"	20.000	83	30-150
4-Chloro-3-methylphenol	17.5	5.00	"	20.000	88	26-103
2-Chlorophenol	14.2	5.00	"	20.000	71	25-102
Diethyl phthalate	16.4	5.00	"	20.000	82	30-150
2,4-Dinitrotoluene	16.1	5.00	"	20.000	81	28-89
Hexachlorobenzene	17.0	5.00	"	20.000	85	30-150
Hexachlorobutadiene	10.8	5.00	"	20.000	54	30-150
Hexachloroethane	9.54	5.00	"	20.000	48	30-150
Isophorone	17.7	5.00	"	20.000	88	30-150
Naphthalene	14.3	5.00	"	20.000	72	30-150
Nitrobenzene	16.0	5.00	"	20.000	80	30-150
4-Nitrophenol	16.5	10.0	"	20.000	82	11-114
N-Nitroso-di-n-propylamine	17.1	5.00	"	20.000	85	41-126
N-Nitrosodiphenylamine	21.3	5.00	"	20.000	107	30-150
Pentachlorophenol	11.6	5.00	"	20.000	58	17-109
Phenol	14.5	5.00	"	20.000	73	26-90
2,4,5-Trichlorophenol	17.0	5.00	"	20.000	85	30-150
2,4,6-Trichlorophenol	17.0	5.00	"	20.000	85	30-150
<i>Surrogate: 2-Fluorophenol</i>	33.2		"	50.000	66	21-110
<i>Surrogate: Phenol-d5</i>	37.1		"	50.000	74	10-110
<i>Surrogate: Nitrobenzene-d5</i>	20.8		"	25.000	83	35-114
<i>Surrogate: 2-Fluorobiphenyl</i>	19.9		"	25.000	79	43-116
<i>Surrogate: 2,4,6-Tribromophenol</i>	42.9		"	50.000	86	10-123
<i>Surrogate: Terphenyl-d14</i>	19.7		"	25.000	79	33-141

1203001 FINAL

DAS R33937

03 28 12 813

Page 107 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21301 - VOC Purge and Trap****Blank (BC21301-BLK1)**

Prepared &amp; Analyzed: 03/12/12 16:25

Acetone	U	2.0	ug/L							
Benzene	U	0.5	"							
Bromobenzene	U	0.5	"							
Bromoform	U	0.5	"							
Bromochloromethane	U	0.5	"							
Bromodichloromethane	U	0.5	"							
Bromomethane	U	0.5	"							
2-Butanone	U	2.0	"							
sec-Butylbenzene	U	0.5	"							
tert-Butylbenzene	U	0.5	"							
n-Butylbenzene	U	0.5	"							
Carbon disulfide	U	0.5	"							
Carbon Tetrachloride	U	0.5	"							
Chlorobenzene	U	0.5	"							
Chlorodibromomethane	U	0.5	"							
Chloroethane	U	0.5	"							
Chloroform	U	0.5	"							
Chloromethane	U	0.5	"							
2-Chlorotoluene	U	0.5	"							
4-Chlorotoluene	U	0.5	"							
Cyclohexane	U	0.5	"							
1,2-Dibromo-3-chloropropane	U	0.5	"							
1,2-Dibromoethane (EDB)	U	0.5	"							
Dibromomethane	U	0.5	"							
1,2-Dichlorobenzene	U	0.5	"							
1,3-Dichlorobenzene	U	0.5	"							
1,4-Dichlorobenzene	U	0.5	"							
Dichlorodifluoromethane	U	0.5	"							
1,1-Dichloroethane	U	0.5	"							
1,2-Dichloroethane	U	0.5	"							
1,1-Dichloroethene	U	0.5	"							
cis-1,2-Dichloroethene	U	0.5	"							
trans-1,2-Dichloroethene	U	0.5	"							
1,2-Dichloropropane	U	0.5	"							
1,3-Dichloropropane	U	0.5	"							
2,2-Dichloropropane	U	0.5	"							
1,1-Dichloropropene	U	0.5	"							
cis-1,3-Dichloropropene	U	0.5	"							
trans-1,3-Dichloropropene	U	0.5	"							
Ethylbenzene	U	0.5	"							
Freon 113	U	0.5	"							



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21301 - VOC Purge and Trap****Blank (BC21301-BLK1)**

Prepared &amp; Analyzed: 03/12/12 16:25

Hexachlorobutadiene	U	0.5	ug/L							
2-Hexanone	U	2.0	"							
Isopropylbenzene	U	0.5	"							
p-Isopropyltoluene	U	0.5	"							
Methyl Acetate	U	0.5	"							
Methylcyclohexane	U	0.5	"							
Methyl-tert-butyl ether	U	0.5	"							
Methylene Chloride	U	0.5	"							
4-Methyl-2-pentanone	U	2.0	"							
Naphthalene	U	0.5	"							
n-Propylbenzene	U	0.5	"							
Styrene	U	1.0	"							
1,1,2,2-Tetrachloroethane	U	0.5	"							
1,1,1,2-Tetrachloroethane	U	0.5	"							
Tetrachloroethene	U	0.5	"							
Toluene	U	0.5	"							
1,2,3-Trichlorobenzene	U	0.5	"							
1,2,4-Trichlorobenzene	U	0.5	"							
1,1,1-Trichloroethane	U	0.5	"							
1,1,2-Trichloroethane	U	0.5	"							
Trichloroethene	U	0.5	"							
Trichlorofluoromethane	U	0.5	"							
1,2,3-Trichloropropane	U	0.5	"							
1,2,4-Trimethylbenzene	U	0.5	"							
1,3,5-Trimethylbenzene	U	0.5	"							
Vinyl acetate	U	0.5	"							
Vinyl chloride	U	0.5	"							
m-Xylene/p-Xylene	U	1.0	"							
o-Xylene	U	1.0	"							
<i>Surrogate: 4-Bromofluorobenzene</i>	3.830	"	4.0000		96	86-115				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.120	"	4.0000		103	76-114				
<i>Surrogate: Toluene-d8</i>	3.940	"	4.0000		98	88-110				



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21301 - VOC Purge and Trap****Blank (BC21301-BLK2)**

Prepared &amp; Analyzed: 03/13/12 10:34

Acetone	U	2.0	ug/L							
Benzene	U	0.5	"							
Bromobenzene	U	0.5	"							
Bromoform	U	0.5	"							
Bromochloromethane	U	0.5	"							
Bromodichloromethane	U	0.5	"							
Bromomethane	U	0.5	"							
2-Butanone	U	2.0	"							
sec-Butylbenzene	U	0.5	"							
tert-Butylbenzene	U	0.5	"							
n-Butylbenzene	U	0.5	"							
Carbon disulfide	U	0.5	"							
Carbon Tetrachloride	U	0.5	"							
Chlorobenzene	U	0.5	"							
Chlorodibromomethane	U	0.5	"							
Chloroethane	U	0.5	"							
Chloroform	U	0.5	"							
Chloromethane	U	0.5	"							
2-Chlorotoluene	U	0.5	"							
4-Chlorotoluene	U	0.5	"							
Cyclohexane	U	0.5	"							
1,2-Dibromo-3-chloropropane	U	0.5	"							
1,2-Dibromoethane (EDB)	U	0.5	"							
Dibromomethane	U	0.5	"							
1,2-Dichlorobenzene	U	0.5	"							
1,3-Dichlorobenzene	U	0.5	"							
1,4-Dichlorobenzene	U	0.5	"							
Dichlorodifluoromethane	U	0.5	"							
1,1-Dichloroethane	U	0.5	"							
1,2-Dichloroethane	U	0.5	"							
1,1-Dichloroethene	U	0.5	"							
cis-1,2-Dichloroethene	U	0.5	"							
trans-1,2-Dichloroethene	U	0.5	"							
1,2-Dichloropropane	U	0.5	"							
1,3-Dichloropropane	U	0.5	"							
2,2-Dichloropropane	U	0.5	"							
1,1-Dichloropropene	U	0.5	"							
cis-1,3-Dichloropropene	U	0.5	"							
trans-1,3-Dichloropropene	U	0.5	"							
Ethylbenzene	U	0.5	"							
Freon 113	U	0.5	"							



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21301 - VOC Purge and Trap****Blank (BC21301-BLK2)**

Prepared &amp; Analyzed: 03/13/12 10:34

Hexachlorobutadiene	U	0.5	ug/L							
2-Hexanone	U	2.0	"							
Isopropylbenzene	U	0.5	"							
p-Isopropyltoluene	U	0.5	"							
Methyl Acetate	U	0.5	"							
Methylcyclohexane	U	0.5	"							
Methyl-tert-butyl ether	U	0.5	"							
Methylene Chloride	U	0.5	"							
4-Methyl-2-pentanone	U	2.0	"							
Naphthalene	U	0.5	"							
n-Propylbenzene	U	0.5	"							
Styrene	U	1.0	"							
1,1,2,2-Tetrachloroethane	U	0.5	"							
1,1,1,2-Tetrachloroethane	U	0.5	"							
Tetrachloroethene	U	0.5	"							
Toluene	U	0.5	"							
1,2,3-Trichlorobenzene	U	0.5	"							
1,2,4-Trichlorobenzene	U	0.5	"							
1,1,1-Trichloroethane	U	0.5	"							
1,1,2-Trichloroethane	U	0.5	"							
Trichloroethene	U	0.5	"							
Trichlorofluoromethane	U	0.5	"							
1,2,3-Trichloropropane	U	0.5	"							
1,2,4-Trimethylbenzene	U	0.5	"							
1,3,5-Trimethylbenzene	U	0.5	"							
Vinyl acetate	U	0.5	"							
Vinyl chloride	U	0.5	"							
m-Xylene/p-Xylene	U	1.0	"							
o-Xylene	U	1.0	"							
<i>Surrogate: 4-Bromofluorobenzene</i>	3.900	"	4.0000		98	86-115				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.300	"	4.0000		108	76-114				
<i>Surrogate: Toluene-d8</i>	3.970	"	4.0000		99	88-110				



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21301 - VOC Purge and Trap****LCS (BC21301-BS1)**

Prepared &amp; Analyzed: 03/12/12 15:31

Acetone	0.37	2.0	ug/L			80-120				J
Benzene	4.77	0.5	"	5.0000	95	80-120				
Bromo-benzene	4.64	0.5	"	5.0000	93	80-120				
Bromo-chloromethane	4.59	0.5	"	5.0000	92	80-120				
Bromo-dichloromethane	4.63	0.5	"	5.0000	93	80-120				
Bromoform	4.39	0.5	"	5.0000	88	80-120				
Bromomethane	6.05	0.5	"	5.0000	121	80-120				A
2-Butanone	U	2.0	"			80-120				
sec-Butylbenzene	5.00	0.5	"	5.0000	100	80-120				
tert-Butylbenzene	5.02	0.5	"	5.0000	100	80-120				
n-Butylbenzene	5.21	0.5	"	5.0000	104	80-120				
Carbon disulfide	U	0.5	"			80-120				
Carbon Tetrachloride	4.86	0.5	"	5.0000	97	80-120				
Chlorobenzene	4.67	0.5	"	5.0000	93	80-120				
Chloro-dibromomethane	4.52	0.5	"	5.0000	90	80-120				
Chloroethane	5.06	0.5	"	5.0000	101	80-120				
Chloroform	4.82	0.5	"	5.0000	96	80-120				
Chloro-methane	6.07	0.5	"	5.0000	121	80-120				A
2-Chloro-toluene	4.80	0.5	"	5.0000	96	80-120				
4-Chloro-toluene	4.96	0.5	"	5.0000	99	80-120				
Cyclohexane	U	0.5	"			80-120				
1,2-Dibromo-3-chloropropane	4.38	0.5	"	5.0000	88	80-120				
1,2-Dibromoethane (EDB)	4.44	0.5	"	5.0000	89	80-120				
Dibromo-methane	4.62	0.5	"	5.0000	92	80-120				
1,2-Dichloro-benzene	4.73	0.5	"	5.0000	95	80-120				
1,3-Dichloro-benzene	4.79	0.5	"	5.0000	96	80-120				
1,4-Dichloro-benzene	4.61	0.5	"	5.0000	92	80-120				
Dichloro-difluoromethane	7.13	0.5	"	5.0000	143	80-120				A
1,1-Dichloro-ethane	4.75	0.5	"	5.0000	95	80-120				
1,2-Dichloro-ethane	4.56	0.5	"	5.0000	91	80-120				
1,1-Dichloro-ethene	5.53	0.5	"	5.0000	111	80-120				
cis-1,2-Dichloro-ethene	4.70	0.5	"	5.0000	94	80-120				
trans-1,2-Dichloro-ethene	4.76	0.5	"	5.0000	95	80-120				
1,2-Dichloro-propane	4.56	0.5	"	5.0000	91	80-120				
1,3-Dichloro-propane	4.49	0.5	"	5.0000	90	80-120				
2,2-Dichloro-propane	5.06	0.5	"	5.0000	101	80-120				
1,1-Dichloro-propene	4.93	0.5	"	5.0000	99	80-120				
cis-1,3-Dichloro-propene	4.66	0.5	"	5.0000	93	80-120				
trans-1,3-Dichloro-propene	4.84	0.5	"	5.0000	97	80-120				
Ethylbenzene	5.01	0.5	"	5.0000	100	80-120				
Freon 113	U	0.5	"			80-120				

1203001 FINAL DAS R33937 03 28 12 813  
Page 112 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21301 - VOC Purge and Trap****LCS (BC21301-BS1)**

Prepared &amp; Analyzed: 03/12/12 15:31

Hexachlorobutadiene	4.79	0.5	ug/L	5.0000		96	80-120			
2-Hexanone	U	2.0	"				80-120			
Isopropylbenzene	5.58	0.5	"	5.0000		112	80-120			
p-Isopropyltoluene	5.43	0.5	"	5.0000		109	80-120			
Methyl Acetate	U	0.5	"				80-120			
Methylcyclohexane	U	0.5	"				80-120			
Methyl-tert-butyl ether	U	0.5	"				80-120			
Methylene Chloride	4.64	0.5	"	5.0000		93	80-120			
4-Methyl-2-pentanone	U	2.0	"				80-120			
Naphthalene	4.62	0.5	"	5.0000		92	80-120			
n-Propylbenzene	5.19	0.5	"	5.0000		104	80-120			
1,1,2,2-Tetrachloroethane	4.25	0.5	"	5.0000		85	80-120			
1,1,1,2-Tetrachloroethane	4.72	0.5	"	5.0000		94	80-120			
Tetrachloroethene	4.93	0.5	"	5.0000		99	80-120			
Toluene	4.74	0.5	"	5.0000		95	80-120			
1,2,3-Trichlorobenzene	4.68	0.5	"	5.0000		94	80-120			
1,2,4-Trichlorobenzene	4.88	0.5	"	5.0000		98	80-120			
1,1,1-Trichloroethane	4.82	0.5	"	5.0000		96	80-120			
1,1,2-Trichloroethane	4.54	0.5	"	5.0000		91	80-120			
Trichloroethene	4.89	0.5	"	5.0000		98	80-120			
Trichlorofluoromethane	5.10	0.5	"	5.0000		102	80-120			
1,2,3-Trichloropropane	4.65	0.5	"	5.0000		93	80-120			
1,2,4-Trimethylbenzene	4.96	0.5	"	5.0000		99	80-120			
1,3,5-Trimethylbenzene	4.88	0.5	"	5.0000		98	80-120			
Vinyl acetate	U	0.5	"				80-120			
Vinyl chloride	5.53	0.5	"	5.0000		111	80-120			
m-Xylene/p-Xylene	9.67	1.0	"	10.000		97	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	4.060		"	4.0000		102	86-115			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	3.950		"	4.0000		99	76-114			
<i>Surrogate: Toluene-d8</i>	3.960		"	4.0000		99	88-110			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21301 - VOC Purge and Trap**

Matrix Spike (BC21301-MS1)	Source: 1203001-04		Prepared & Analyzed: 03/13/12 11:01					
Acetone	4.46	2.0	ug/L	5.0000	0.00	89	70-130	
Benzene	4.93	0.5	"	5.0000	0.00	99	76-127	
Bromo-benzene	4.54	0.5	"	5.0000	0.00	91	70-130	
Bromo-chloromethane	4.56	0.5	"	5.0000	0.00	91	70-130	
Bromo-dichloromethane	4.67	0.5	"	5.0000	0.00	93	70-130	
Bromoform	4.01	0.5	"	5.0000	0.00	80	70-130	
Bromo-methane	4.15	0.5	"	5.0000	0.00	83	70-130	
2-Butanone	3.98	2.0	"	5.0000	0.00	80	70-130	
sec-Butylbenzene	4.89	0.5	"	5.0000	0.00	98	70-130	
tert-Butylbenzene	4.82	0.5	"	5.0000	0.00	96	70-130	
n-Butylbenzene	5.03	0.5	"	5.0000	0.00	101	70-130	
Carbon disulfide	5.38	0.5	"	5.0000	0.00	108	70-130	
Carbon Tetrachloride	4.99	0.5	"	5.0000	0.00	100	70-130	
Chloro-benzene	4.64	0.5	"	5.0000	0.00	93	75-130	
Chloro-dibromomethane	4.53	0.5	"	5.0000	0.00	91	70-130	
Chloro-ethane	5.28	0.5	"	5.0000	0.00	106	70-130	
Chloro-form	4.87	0.5	"	5.0000	0.00	97	70-130	
Chloro-methane	4.66	0.5	"	5.0000	0.00	93	70-130	
2-Chloro-toluene	4.75	0.5	"	5.0000	0.00	95	70-130	
4-Chloro-toluene	4.75	0.5	"	5.0000	0.00	95	70-130	
1,2-Dibromo-3-chloropropane	4.21	0.5	"	5.0000	0.00	84	70-130	
1,2-Dibromoethane (EDB)	4.48	0.5	"	5.0000	0.00	90	70-130	
Dibromo-methane	4.71	0.5	"	5.0000	0.00	94	70-130	
1,2-Dichloro-benzene	4.55	0.5	"	5.0000	0.00	91	70-130	
1,3-Dichloro-benzene	4.56	0.5	"	5.0000	0.00	91	70-130	
1,4-Dichloro-benzene	4.46	0.5	"	5.0000	0.00	89	70-130	
Dichloro-difluoromethane	5.35	0.5	"	5.0000	0.00	107	70-130	
1,1-Dichloro-ethane	4.86	0.5	"	5.0000	0.00	97	70-130	
1,2-Dichloro-ethane	4.54	0.5	"	5.0000	0.00	91	70-130	
1,1-Dichloro-ethene	5.30	0.5	"	5.0000	0.00	106	61-145	
cis-1,2-Dichloro-ethene	4.87	0.5	"	5.0000	0.00	97	70-130	
trans-1,2-Dichloro-ethene	4.90	0.5	"	5.0000	0.00	98	70-130	
1,2-Dichloro-propane	4.80	0.5	"	5.0000	0.00	96	70-130	
1,3-Dichloro-propane	4.64	0.5	"	5.0000	0.00	93	70-130	
2,2-Dichloro-propane	4.95	0.5	"	5.0000	0.00	99	70-130	
1,1-Dichloro-propene	4.85	0.5	"	5.0000	0.00	97	70-130	
cis-1,3-Dichloro-propene	4.74	0.5	"	5.2500	0.00	90	70-130	
trans-1,3-Dichloro-propene	4.14	0.5	"	4.7500	0.00	87	70-130	
Ethylbenzene	5.00	0.5	"	5.0000	0.00	100	70-130	
Hexachlorobutadiene	4.83	0.5	"	5.0000	0.00	97	70-130	
2-Hexanone	4.06	2.0	"	5.0000	0.00	81	70-130	

1203001 FINAL

DAS R33937

03 28 12 813

Page 114 of 122



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region 3 Environmental Science Center  
 Office of Analytical Services and Quality Assurance  
 701 Mapes Road  
 Fort Meade, Maryland 20755-5350



**Site Name:** Dimock Residential Groundwater

**Project #:** DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21301 - VOC Purge and Trap**

Matrix Spike (BC21301-MS1)	Source: 1203001-04		Prepared & Analyzed: 03/13/12 11:01						
Isopropylbenzene	4.85	0.5	ug/L	5.0000	0.00	97	70-130		
p-Isopropyltoluene	4.97	0.5	"	5.0000	0.00	99	70-130		
Methylene Chloride	4.70	0.5	"	5.0000	0.00	94	70-130		
4-Methyl-2-pentanone	4.41	2.0	"	5.0000	0.00	88	70-130		
Naphthalene	4.36	0.5	"	5.0000	0.00	87	70-130		
n-Propylbenzene	4.93	0.5	"	5.0000	0.00	99	70-130		
1,1,2,2-Tetrachloroethane	4.56	0.5	"	5.0000	0.00	91	70-130		
1,1,1,2-Tetrachloroethane	4.58	0.5	"	5.0000	0.00	92	70-130		
Tetrachloroethene	4.72	0.5	"	5.0000	0.00	94	70-130		
Toluene	4.75	0.5	"	5.0000	0.00	95	76-125		
1,2,3-Trichlorobenzene	4.33	0.5	"	5.0000	0.00	87	70-130		
1,2,4-Trichlorobenzene	4.29	0.5	"	5.0000	0.00	86	70-130		
1,1,1-Trichloroethane	4.84	0.5	"	5.0000	0.00	97	70-130		
1,1,2-Trichloroethane	4.54	0.5	"	5.0000	0.00	91	70-130		
Trichloroethene	4.85	0.5	"	5.0000	0.00	97	71-120		
Trichlorofluoromethane	5.40	0.5	"	5.0000	0.00	108	70-130		
1,2,3-Trichloropropane	4.48	0.5	"	5.0000	0.00	90	70-130		
1,2,4-Trimethylbenzene	4.84	0.5	"	5.0000	0.00	97	70-130		
1,3,5-Trimethylbenzene	4.89	0.5	"	5.0000	0.00	98	70-130		
Vinyl acetate	4.83	0.5	"	5.0000	0.00	97	70-130		
Vinyl chloride	5.19	0.5	"	5.0000	0.00	104	70-130		
m-Xylene/p-Xylene	9.86	1.0	"	10.000	0.00	99	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	3.980		"	4.0000		100	86-115		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	3.990		"	4.0000		100	76-114		
<i>Surrogate: Toluene-d8</i>	3.970		"	4.0000		99	88-110		

Matrix Spike Dup (BC21301-MSD1)	Source: 1203001-04		Prepared & Analyzed: 03/13/12 11:28						
Acetone	4.45	2.0	ug/L	5.0000	0.00	89	70-130	0.2	20
Benzene	5.17	0.5	"	5.0000	0.00	103	76-127	5	11
Bromobenzene	4.70	0.5	"	5.0000	0.00	94	70-130	3	20
Bromochloromethane	5.14	0.5	"	5.0000	0.00	103	70-130	12	20
Bromodichloromethane	4.94	0.5	"	5.0000	0.00	99	70-130	6	20
Bromoform	4.34	0.5	"	5.0000	0.00	87	70-130	8	20
Bromomethane	4.46	0.5	"	5.0000	0.00	89	70-130	7	20
2-Butanone	4.21	2.0	"	5.0000	0.00	84	70-130	6	20
sec-Butylbenzene	4.94	0.5	"	5.0000	0.00	99	70-130	1	20
tert-Butylbenzene	4.96	0.5	"	5.0000	0.00	99	70-130	3	20
n-Butylbenzene	5.11	0.5	"	5.0000	0.00	102	70-130	2	20
Carbon disulfide	5.26	0.5	"	5.0000	0.00	105	70-130	2	20
Carbon Tetrachloride	5.20	0.5	"	5.0000	0.00	104	70-130	4	20
Chlorobenzene	4.76	0.5	"	5.0000	0.00	95	75-130	3	13

1203001 FINAL DAS R33937 03 28 12 813  
 Page 115 of 122



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

QC Data  
Volatile Organic Compounds

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BC21301 - VOC Purge and Trap

Matrix Spike Dup (BC21301-MSD1)	Source: 1203001-04			Prepared & Analyzed: 03/13/12 11:28					
Chlorodibromomethane	4.68	0.5	ug/L	5.0000	0.00	94	70-130	3	20
Chloroethane	5.13	0.5	"	5.0000	0.00	103	70-130	3	20
Chloroform	5.11	0.5	"	5.0000	0.00	102	70-130	5	20
Chloromethane	4.63	0.5	"	5.0000	0.00	93	70-130	0.6	20
2-Chlorotoluene	4.84	0.5	"	5.0000	0.00	97	70-130	2	20
4-Chlorotoluene	4.95	0.5	"	5.0000	0.00	99	70-130	4	20
1,2-Dibromo-3-chloropropane	4.41	0.5	"	5.0000	0.00	88	70-130	5	20
1,2-Dibromoethane (EDB)	4.60	0.5	"	5.0000	0.00	92	70-130	3	20
Dibromomethane	4.85	0.5	"	5.0000	0.00	97	70-130	3	20
1,2-Dichlorobenzene	4.63	0.5	"	5.0000	0.00	93	70-130	2	20
1,3-Dichlorobenzene	4.68	0.5	"	5.0000	0.00	94	70-130	3	20
1,4-Dichlorobenzene	4.66	0.5	"	5.0000	0.00	93	70-130	4	20
Dichlorodifluoromethane	5.23	0.5	"	5.0000	0.00	105	70-130	2	20
1,1-Dichloroethane	5.09	0.5	"	5.0000	0.00	102	70-130	5	20
1,2-Dichloroethane	4.91	0.5	"	5.0000	0.00	98	70-130	8	20
1,1-Dichloroethene	5.34	0.5	"	5.0000	0.00	107	61-145	0.8	14
cis-1,2-Dichloroethene	5.14	0.5	"	5.0000	0.00	103	70-130	5	20
trans-1,2-Dichloroethene	4.98	0.5	"	5.0000	0.00	100	70-130	2	20
1,2-Dichloropropane	5.07	0.5	"	5.0000	0.00	101	70-130	5	20
1,3-Dichloropropane	4.85	0.5	"	5.0000	0.00	97	70-130	4	20
2,2-Dichloropropane	5.37	0.5	"	5.0000	0.00	107	70-130	8	20
1,1-Dichloropropene	5.14	0.5	"	5.0000	0.00	103	70-130	6	20
cis-1,3-Dichloropropene	5.23	0.5	"	5.2500	0.00	100	70-130	10	20
trans-1,3-Dichloropropene	4.24	0.5	"	4.7500	0.00	89	70-130	2	20
Ethylbenzene	5.19	0.5	"	5.0000	0.00	104	70-130	4	20
Hexachlorobutadiene	4.73	0.5	"	5.0000	0.00	95	70-130	2	20
2-Hexanone	3.77	2.0	"	5.0000	0.00	75	70-130	7	20
Isopropylbenzene	5.00	0.5	"	5.0000	0.00	100	70-130	3	20
p-Isopropyltoluene	5.04	0.5	"	5.0000	0.00	101	70-130	1	20
Methylene Chloride	4.97	0.5	"	5.0000	0.00	99	70-130	6	20
4-Methyl-2-pentanone	4.47	2.0	"	5.0000	0.00	89	70-130	1	20
Naphthalene	4.60	0.5	"	5.0000	0.00	92	70-130	5	20
n-Propylbenzene	5.06	0.5	"	5.0000	0.00	101	70-130	3	20
1,1,2,2-Tetrachloroethane	4.58	0.5	"	5.0000	0.00	92	70-130	0.4	20
1,1,1,2-Tetrachloroethane	4.75	0.5	"	5.0000	0.00	95	70-130	4	20
Tetrachloroethene	4.89	0.5	"	5.0000	0.00	98	70-130	4	20
Toluene	4.87	0.5	"	5.0000	0.00	97	76-125	2	13
1,2,3-Trichlorobenzene	4.56	0.5	"	5.0000	0.00	91	70-130	5	20
1,2,4-Trichlorobenzene	4.53	0.5	"	5.0000	0.00	91	70-130	5	20
1,1,1-Trichloroethane	5.10	0.5	"	5.0000	0.00	102	70-130	5	20
1,1,2-Trichloroethane	4.81	0.5	"	5.0000	0.00	96	70-130	6	20

1203001 FINAL

DAS R33937

03 28 12 813

Page 116 of 122



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Volatile Organic Compounds**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21301 - VOC Purge and Trap**

Matrix Spike Dup (BC21301-MSD1)	Source: 1203001-04		Prepared & Analyzed: 03/13/12 11:28						
Trichloroethene	5.06	0.5	ug/L	5.0000	0.00	101	71-120	4	14
Trichlorofluoromethane	5.23	0.5	"	5.0000	0.00	105	70-130	3	20
1,2,3-Trichloropropane	4.45	0.5	"	5.0000	0.00	89	70-130	0.7	20
1,2,4-Trimethylbenzene	5.02	0.5	"	5.0000	0.00	100	70-130	4	20
1,3,5-Trimethylbenzene	5.05	0.5	"	5.0000	0.00	101	70-130	3	20
Vinyl acetate	4.87	0.5	"	5.0000	0.00	97	70-130	0.8	20
Vinyl chloride	5.16	0.5	"	5.0000	0.00	103	70-130	0.6	20
m-Xylene/p-Xylene	10.09	1.0	"	10.000	0.00	101	70-130	2	20
<i>Surrogate: 4-Bromofluorobenzene</i>	3.910		"	4.0000		98	86-115		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.050		"	4.0000		101	76-114		
<i>Surrogate: Toluene-d8</i>	3.920		"	4.0000		98	88-110		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Total Metals**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch BC21203 - Metals Water Prep****Blank (BC21203-BLK1)**

Prepared: 03/12/12 10:38    Analyzed: 03/14/12 12:50

Antimony	U	2.0	ug/L
Arsenic	U	1.0	"
Barium	U	10.0	"
Beryllium	U	1.0	"
Cadmium	U	1.0	"
Chromium	U	2.0	"
Cobalt	U	1.0	"
Copper	U	2.0	"
Lead	U	1.0	"
Manganese	U	1.0	"
Nickel	U	1.0	"
Selenium	U	5.0	"
Silver	U	1.0	"
Thallium	U	1.0	"
Vanadium	U	5.0	"
Zinc	U	2.0	"
Aluminum	U	30.0	"
Uranium	U	1.0	"

**Blank (BC21203-BLK2)**

Prepared: 03/12/12 10:38    Analyzed: 03/13/12 10:16

Calcium	U	500	ug/L
Iron	U	100	"
Magnesium	U	500	"
Potassium	U	2000	"
Sodium	U	1000	"
Barium	U	200	"
Boron	U	50.0	"
Lithium	U	25.0	"
Strontium	U	200	"
Tin	U	200	"
Titanium	U	200	"



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Total Metals**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21203 - Metals Water Prep****LCS (BC21203-BS1)**

					Prepared: 03/12/12 10:38	Analyzed: 03/14/12 12:55
Antimony	54.1183	2.0	ug/L	50.000	108	85-115
Arsenic	50.7513	1.0	"	50.000	102	85-115
Barium	200.931	10.0	"	200.00	100	85-115
Beryllium	5.14209	1.0	"	5.0000	103	85-115
Cadmium	4.85153	1.0	"	5.0000	97	85-115
Chromium	52.7012	2.0	"	50.000	105	85-115
Cobalt	53.7673	1.0	"	50.000	108	85-115
Copper	54.0380	2.0	"	50.000	108	85-115
Lead	51.0658	1.0	"	50.000	102	85-115
Manganese	52.5564	1.0	"	50.000	105	85-115
Nickel	52.1921	1.0	"	50.000	104	85-115
Selenium	49.6623	5.0	"	50.000	99	85-115
Silver	5.68818	1.0	"	5.0000	114	85-115
Thallium	49.3160	1.0	"	50.000	99	85-115
Vanadium	51.5711	5.0	"	50.000	103	85-115
Zinc	51.6573	2.0	"	50.000	103	85-115
Aluminum	215.914	30.0	"	200.00	108	85-115
Uranium	51.6572	1.0	"	50.000	103	85-115

**LCS (BC21203-BS2)**

					Prepared: 03/12/12 10:38	Analyzed: 03/13/12 10:19
Calcium	9843.20	500	ug/L	10000	98	85-115
Iron	5047.33	100	"	5000.0	101	85-115
Magnesium	10394.8	500	"	10000	104	85-115
Potassium	20853.2	2000	"	20000	104	85-115
Sodium	9691.60	1000	"	10000	97	85-115
Barium	1972.54	200	"	2000.0	99	85-115
Boron	513.817	50.0	"	500.00	103	85-115
Lithium	549.034	25.0	"	500.00	110	85-115
Strontium	503.189	200	"	500.00	101	85-115
Tin	498.456	200	"	500.00	100	85-115
Titanium	525.781	200	"	500.00	105	85-115



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Total Metals**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21203 - Metals Water Prep**

Duplicate (BC21203-DUP1)	Source: 1203001-02		Prepared: 03/12/12 10:38	Analyzed: 03/14/12 13:05			
Antimony	0.024162	2.0	ug/L	0.025025	4	20	
Arsenic	9.60953	1.0	"	9.29011	3	20	
Barium	1730.41	10.0	"	1714.48	0.9	20	
Beryllium	U	1.0	"	0.006260		20	
Cadmium	U	1.0	"	U		20	
Chromium	U	2.0	"	U		20	
Cobalt	0.054892	1.0	"	0.053888	2	20	
Copper	3.10982	2.0	"	3.02668	3	20	
Lead	U	1.0	"	U		20	
Manganese	214.964	1.0	"	216.841	0.9	20	
Nickel	0.684742	1.0	"	0.845140	21	20	D
Selenium	0.300910	5.0	"	0.287040	5	20	
Silver	U	1.0	"	U		20	
Thallium	U	1.0	"	U		20	
Vanadium	0.365662	5.0	"	0.455582	22	20	D
Zinc	2.93056	2.0	"	2.60657	12	20	
Aluminum	2.26438	30.0	"	2.96237	27	20	D
Uranium	0.010888	1.0	"	0.006488	51	20	D

Duplicate (BC21203-DUP2)	Source: 1203001-02		Prepared: 03/12/12 10:38	Analyzed: 03/13/12 10:30			
Calcium	29062.4	500	ug/L	29848.9	3	20	
Iron	739.691	100	"	754.164	2	20	
Magnesium	7360.94	500	"	7487.38	2	20	
Potassium	1331.16	2000	"	1354.07	2	20	
Sodium	19929.4	1000	"	20306.4	2	20	
Barium	1616.31	200	"	1653.15	2	20	
Boron	48.5396	50.0	"	49.8622	3	20	
Lithium	44.4354	25.0	"	47.6915	7	20	
Strontium	847.778	200	"	864.608	2	20	
Tin	3.52864	200	"	U	200	20	D
Titanium	U	200	"	U		20	



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**QC Data**  
**Total Metals**

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	--------------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch BC21203 - Metals Water Prep**

<b>Matrix Spike (BC21203-MS1)</b>		<b>Source: 1203001-09</b>		Prepared: 03/12/12 10:38		Analyzed: 03/14/12 13:46	
Antimony	53.3540	2.0	ug/L	50.000	0.014818	107	70-130
Arsenic	48.0864	1.0	"	50.000	U	96	70-130
Barium	260.787	10.0	"	200.00	68.4151	96	70-130
Beryllium	5.49421	1.0	"	5.0000	0.013345	110	70-130
Cadmium	4.75154	1.0	"	5.0000	U	95	70-130
Chromium	51.1117	2.0	"	50.000	0.688805	101	70-130
Cobalt	50.1582	1.0	"	50.000	0.074605	100	70-130
Copper	69.8670	2.0	"	50.000	20.4795	99	70-130
Lead	50.7791	1.0	"	50.000	0.558395	100	70-130
Manganese	50.2177	1.0	"	50.000	0.024240	100	70-130
Nickel	48.9506	1.0	"	50.000	1.01036	96	70-130
Selenium	48.1231	5.0	"	50.000	0.051035	96	70-130
Silver	5.43220	1.0	"	5.0000	U	109	70-130
Thallium	48.4561	1.0	"	50.000	U	97	70-130
Vanadium	50.7567	5.0	"	50.000	U	102	70-130
Zinc	64.3924	2.0	"	50.000	15.5133	98	70-130
Aluminum	217.519	30.0	"	200.00	9.82136	104	70-130
Uranium	52.1318	1.0	"	50.000	0.463778	103	70-130

<b>Matrix Spike (BC21203-MS2)</b>		<b>Source: 1203001-09</b>		Prepared: 03/12/12 10:38		Analyzed: 03/13/12 11:04	
Calcium	43665.4	500	ug/L	10000	31895.0	118	70-130
Iron	5177.21	100	"	5000.0	9.56564	103	70-130
Magnesium	18156.8	500	"	10000	7035.23	111	70-130
Potassium	22771.8	2000	"	20000	1353.03	107	70-130
Sodium	27487.1	1000	"	10000	16089.3	114	70-130
Boron	545.988	50.0	"	500.00	11.4470	107	70-130
Lithium	567.166	25.0	"	500.00	1.94099	113	70-130
Strontium	576.180	200	"	500.00	65.9451	102	70-130
Tin	494.595	200	"	500.00	0.822522	99	70-130
Titanium	527.638	200	"	500.00	U	106	70-130



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center  
Office of Analytical Services and Quality Assurance  
701 Mapes Road  
Fort Meade, Maryland 20755-5350



Site Name: Dimock Residential Groundwater

Project #: DAS R33937

**Notes and Definitions**

- UJ The analyte was not detected at or above the quantitation limit. The quantitation limit is an estimate.
- T Tentatively Identified Compound. Identified as a result of a library search using the EPA/NIST Mass Spectral Library. Standards were not used to verify the identity and quantity of the compound. The reported value is an estimate.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- D Source sample result and/or duplicate sample result are below the quantitation limit and the RPD is artificially high. Precision data (RPD value) has no significance for this QC Sample.
- B Not detected substantially above (10 times) the level reported in the laboratory or field blanks (including field, trip, rinsate, and equipment blanks).
- A Quality control value is outside acceptance limits.
- %REC Percent Recovery
- RPD Relative Percent Difference
- U Analyte included in the analysis, but not detected at or above the quantitation limit.

**QUANTITATION LIMIT:** The lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method and that takes into account analytical adjustments made during sample preparation and analysis.

**SOLID SAMPLE RESULTS - REPORTING PROTOCOL:** Solid samples where % Solids (percent dry wt at 105 degrees C) has been performed, are analyzed wet and converted to a dry weight result for reporting purposes. This is routine for organics and most inorganic analyses. When metals and mercury analyses are requested, solid samples are routinely analyzed and reported on a dry weight basis. Solid samples for metals/mercury are prepared for analysis by an initial drying at 60 degree C and homogenization before digestion. Oil-type samples will be analyzed and reported on a wet weight basis for all analyses because of the nature of the sample. Any exceptions to the protocol will be noted with a qualifier

**ON-DEMAND:** The term 'on-demand' analysis, if noted in the report narrative, refers to Section 13.1.4 in the Region III OASQA Laboratory Quality Manual, which provides procedures for non-routine analyses or analytes.